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Study of Native Youth in Edmonton.

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A STUDY OF NATIVE YOUTH IN EDMONTON

June 1971

ALBERTA DEPARTMENT OF CULTURE, YOUTH AND RECREATION

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PREFACE

The Department of Youth (Department of Culture, Youth and Recreation), since its inception, has been involved with the Native Youth of the Province of Alberta. To facilitate work with this group, the Department established an office in conjunction with the Leadership office. The office was staffed by an individual of Native affiliation. The Department also established a standing committee known as the "Native Youth Advisory Committee".

During the last quarter of 1969, the "Native Youth Advisory Committee" developed plans for a research project which would attempt to identify the needs of the native youth in the City of Edmonton and to ascertain the extent to which these needs, in the opinion of the Native Youth, are being met by agencies within the city.

The Advisory Committee, chaired by Mr. R.R. Nicholson, Leadership Development Specialist, assumed the role of initiator and advocate of the project. It was through his office that monies were authorized for the study.

To achieve the original objectives in compliance with the wishes of all interested and affected parties, two separate yet inter-dependent studies were carried out. The first phase of this study was conducted during the month of May, 1970 by Dr. B.Y. Card. This was an "Exploratory Survey of the Numbers and Distribution of Native Canadian Youth Between Ages of Twelve and Twenty-Five in the City of Edmonton".

The second phase of the study was administered and designed by:

L. Lamothe, S. Hlope, J. Leat, L. Keown and G. Siperko.

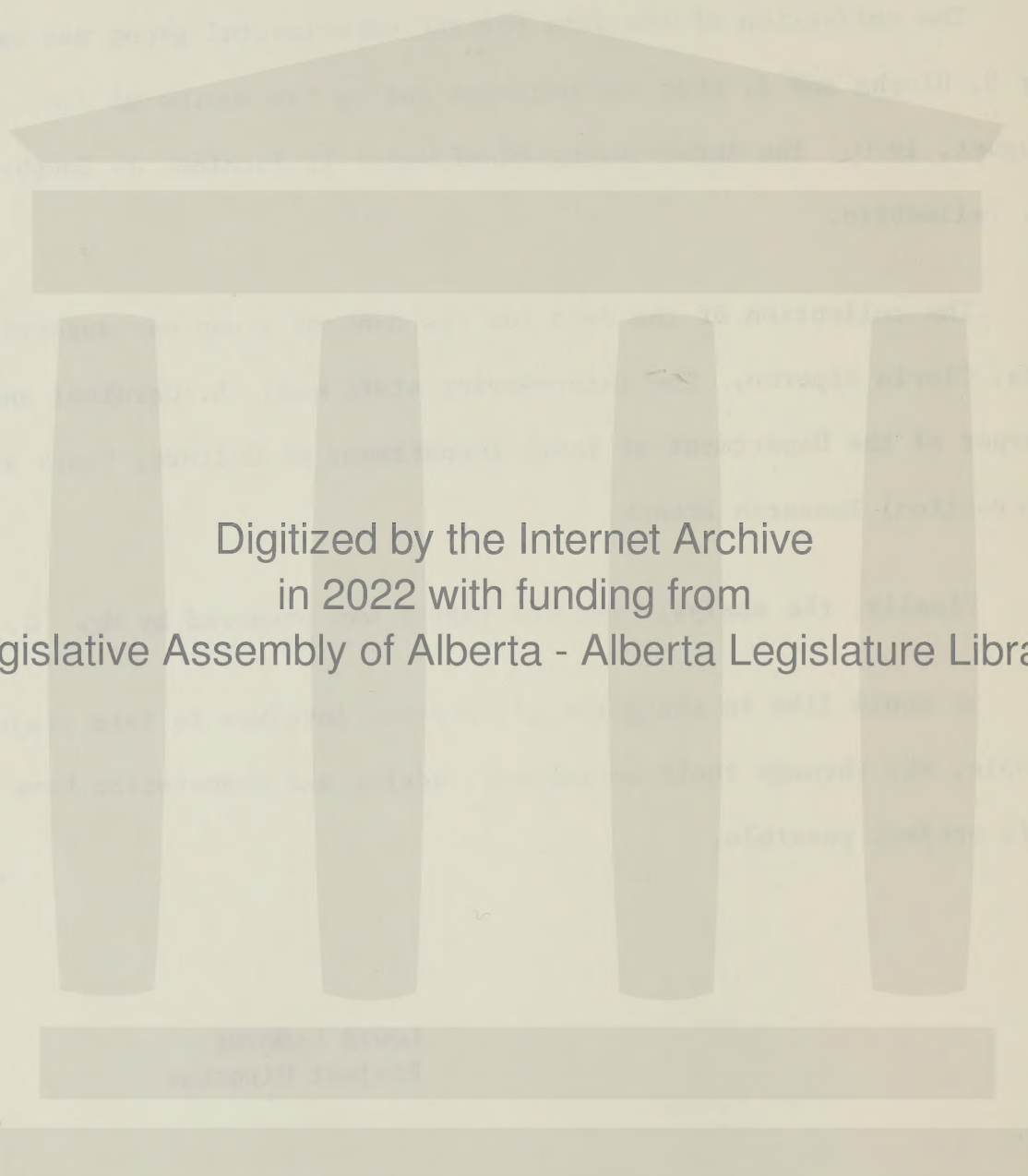
The collection of the data for the experimental group was supervised by S. Hlophe and J. Leat and occurred during the months of June, July and August, 1970. The interviewing staff was: T. Antoine, J. Campbell and R. Yellowbird.

The collection of the data for the control group was supervised by Mrs. Gloria Siperko. The interviewing staff was: L. Cardinal and N. Harper of the Department of Youth (Department of Culture, Youth and Recreation) Research Branch.

Finally, the analysis and the report was prepared by Mrs. G. Siperko.

We would like to recognize all persons involved in this project. People, who through their assistance, advice and cooperation have made this project possible.

LOUIS LAMOTHE
Project Director



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A STUDY OF NATIVE YOUTH IN

EDMONTON

June, 1971

By:

Gloria M. Burima Siperko

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I wish to acknowledge the assistance of the following people at the different stages of the research project:

- 1) Mr. L.L. Keown, for his continuing consulting assistance to the present researcher from the data coding to the writing of the report (especially consultation re the component analysis).
- 2) Mr. Louis Lamothe, for his assistance in the gathering of the control (non-native youth) sample data, and his co-operation through to the writing of the report.
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CHAPTER I

INTRODUCTION

Phase I of the Native Youth Study was an exploratory survey of the number and distribution of native youth in the city of Edmonton (both transient and resident).¹ This survey suggested that there were approximately 2000 youth of native origin in Edmonton during May of 1970. This survey also suggested the age, sex, grade level, school, residence and ethnicity (Metis, Indian or Eskimo) of this native youth population. Therefore, Phase I provided a base population from which the sample for Phase II was selected.

The present report is concerned with Phase II of the Native Youth Survey which is an exploratory descriptive analysis of the Native Youth in Edmonton.² The Native Youth Advisory Committee requested this phase of the research to meet the three following objectives:

1. To determine the needs of native youth and the resources needed to meet these needs,
2. To determine the availability and adequacy of present resources intended to meet these needs, and

-
- 1 Card, B.Y. - 1970 "An Exploratory Survey of the Numbers and Distribution of Native Canadian Youth Between the Ages of Twelve and Twenty-Five in the City of Edmonton, During May, 1970", a study prepared for the Research Branch of the Alberta Department of Youth, June, 1970.
 - 2 It is important to note that the present researcher was not present at every stage of this study. The Research Director of the Research Branch, Department of Youth (Mr. Rebill) commissioned the present researcher to write the report of the Native Youth Study, Phase II, in the Fall of 1970. This was after the survey design, interview schedule content, interviewer instruction, and data collection were completed. The present researcher was in charge of assisting in the supervising of the coding of the schedules, designing and supervising the control sample, data collection, theoretical rationale and background, data analysis, and writing of the report.

3. To recommend action to be taken where resources are either non-existent or inadequate.¹

The native youth research sub-committee further outlined some objectives² that were also restated by Dr. Card in the Phase I report.³ Considering the various sources of research objectives outlined above, plus the researcher's meetings with several of the researchers previously and concurrently attached to Phase II of the Native Youth Study⁴ the following outline of objectives was formulated.

General Objectives:

- I. Determine the needs of native youth (perceived needs).
- II. Determine the correspondence between native youth perceived needs and non-native needs.
- III. Determine the adequacy of resources needed to meet needs.

In addition to these general objectives, four groups of objectives were outlined to correspond to the four following areas of interest:

- 1) agency information - perceived general resources and needs
- 2) education information - perceived educational resources and demographic information
- 3) social information - general attitudes, values & personality factors
- 4) employment information - demographic information

1 Memorandum from R.R. Nicholson to D.H. Rehill, dated February 25, 1970, see Appendix Q.

2 At "meeting with Research Supervisor", dated Friday, April 17, 1970, Appendix Q.

3 Card, B.Y., op. cit.

4 Memorandums from G. Siperko to D.H. Rehill dated November 18 and 26 concerning discussions of research objectives with L. Lamothe, R.R. Nicholson and L.L. Keown, See Appendix Q.

The specific objectives directly related to these areas of interest are:¹

Agency Information:

- 1) Determine the resources available to meet needs.
- 2) Determine the adequacy of resources:
 - a) perception of whether agencies are meeting youths' needs.
 - b) are there enough agencies (quantity).
 - c) quality of services.
- 3) Suggest recommendations to make up for inadequacy of agency services in specific areas:
 - a) future expansion
 - b) development of youth serving agencies

Education Information:

- 4) Determine under what circumstances natives consider leaving school.
- 5) Determine the attitudes of native youth toward school structure, administration and fellow students.
- 6) Determine the native youth educational goals and needs.
- 7) Assess if the educational system (curriculum) is meeting perceived educational needs and goals of the native youth.
- 8) If the curriculum isn't meeting the needs of the native youth, determine how the curriculum can be changed.

¹ These objectives will be met mainly by a descriptive analysis of the survey data.

Employment Information:

- 9) Determine the character and extent of native youth employment:
 - a) non-student employment
 - b) student employment
 - c) job satisfaction and chances for promotion
 - d) student summer employment
 - e) summer unemployment
- 10) Determine reasons for unemployment.
- 11) Determine procedures used for finding jobs in past.
- 12) Determine extent of difficulty in finding employment.

Social Information:

- 13) Determine the native transient youth factor structure
- 14) Determine the native student factor structure
- 15) Determine the non-native student factor structures
- 16) Compare the factor structures of the native and non-native samples, and isolate peculiar characteristics of each sample
- 17) Describe the perceived needs of the native and non-native youth.

Chapter II of this report presents a statement of relevant background material, Chapter III presents the research design, and Chapter IV presents method and methodology of the data analysis for the native youth study.

The data analysis of the native youth sample according to the survey data is presented below in Chapters IV to XI. This data analysis includes both descriptive and statistical points. The summary and conclusions will be presented in Chapter XII and the Implications and Recommendations will be presented in Chapter XIII.

CHAPTER II

RELATED RESEARCH AND THEORETICAL ISSUES

A number of important theoretical issues relevant to the native youth situation are present in the literature. These issues are a direct basis for the hypotheses, concepts and variables that will be listed below in Chapter III. Howard (1970) has suggested, in his recent book on "neglected minority groups" (including the North American Indian), that studies on negroes and/or European immigrant groups as minorities are not applicable to the theoretical issues of the native situation. Howard suggested that the literature on negroes tends to emphasize anti-black sentiments, stereotyping and the dynamics of the prejudiced personality; while cultural differences and the assimilation processes have been emphasized in the analysis of the experiences of European immigrant groups. These issues are suggested as not centrally relevant to the native situation, and the natives are also labelled as partial minorities by Howard. Howard also stated that the essence of the native problem in the United States is that they "lack the power to act in their own behalf" (p. 13).¹

The ideas presented by Howard suggest that the traditional minority group concepts may not be as relevant as some other concepts that apply mainly to the Canadian native situation. Therefore, working in a relatively unresearched and open area, some theoretical issues and concepts are suggested below.

The Question of Native Youth Needs

Needs are understood to be social, psychological, emotional, economic and intellectual requirements for survival in any social milieu or system.

1 Howard, J.R., 1970, "Ethnic Stratification Systems", an introduction to Awakening Minorities, edited by John R. Howard, Aldine Publishing Co.

Native is defined as anyone of American native ancestry - native meaning Indian, Eskimo or Metis. Youth is understood here to include the age groups from early adolescence (11-12) to middle twenties (up to 25). One of the major purposes of this report is to identify the needs of the native youth population. This may be an impossible task because it may be that this population is not able to discuss their needs due to their inability to conceptualize and/or verbalize their feelings. A partial solution to this problem may be assisting the native population to recognize when they need help, when their needs are not being met and to verbalize these conditions.

The general feeling (as derived from a brief literature review) seems to be that natives are basically different in terms of: cognitive structures, values, attitudes, and personality in general (Lagasse, Chance, and Hawthorn¹). Chance (1968) suggests that the different cognitive organization of natives is reflected in non-assertive attributes, lack of achievement, motivation or competition, and unwillingness to interfere with the activities of others. Lagasse (1959) suggests that the native's type of ambition and pride are a product of their inefficient and disorderly social social milieu.

Hawthorn (1966) suggests that all natives have some characteristics in common that distinguish them from most whites. Some of these characteristics were later defined as:

-
- 1 Lagasse, J.H., A Study of the Population of Indian Ancestry Living In Manitoba, undertaken by the Social and Economic Research Office, Main Report, Winnipeg, Manitoba: The Department of Agriculture & Immigration, Vol. 1.
 - Chance, N.A., 1968, Developmental Change Among the Civil Indians of Quebec, Arda Project #34002; Summary Report, McGill University: McGill Project, December, 1968, revised April, 1969.
 - Hawthorn, H.B., 1966, A Survey of the Contemporary Indians of Canada: A Report on Economic Political, Educational Needs and Policies, Vols. I and II, October, 1966, Ottawa: Indian Affairs Branch.

- i) strong desire for independent status
- ii) fear & suspicion of whites
- iii) identity conflict
- iv) under-educated
- v) familiarity with free routines and independent behaviour
- vi) powerlessness and alienation (self-estrangement)
- vii) low levels of aspiration
- viii) poor self-images and low self-confidence
- ix) desire to maintain an Indian ethnic identity

However, Hawthorn also stated that the Indians of Canada want the material goods that other Canadians have, in terms of income, housing, cars, furnishings, clothes, food, etc.. In fact the major reasons that native children have given for wanting an education were: to have a better life, to get along better with whites, and to have a better job.

Lagasse (1959) attributes the majority of the different native characteristics to native cultural socialization and general social milieu. He also suggests that the differences in characteristics between native and non-native youth are not as evident, though still noticeable, for Metis and Indian youth born and raised in a predominantly white community¹.

These findings suggest that native youth have both needs that are similar and needs that are different from white middle-class youth. It may be argued that since there is some evidence to suggest that the cognitive structure, values, attitudes, and personality in general, are different for native youth

1 These observations are based on a descriptive account of observations.

compared with non-native youth, then the needs of these two groups will also differ.

PERCEIVED OPPORTUNITY

The concept of perceived opportunity is relevant in both the educational and the employment areas. It can be seen that the native child's first exposure to white society is crucial in the development of his self-concept and ability to succeed. To begin with, the native child is at a disadvantage; since due to his different background, he is not as equally equipped as a white middle-class child to succeed in his milieu of middle-class norms. The native children are at a disadvantage culturally (their culture stresses different important traits), intellectually (they have minimal exposure to the school-type learning experience), and socially (they are sometimes ill-dressed and poorly fed).

Hawthorn (1966) suggests that the process of socialization within the school represents a clear discontinuity for the Indian child, from the socialization within his family. Initially the child identifies himself with other Indians, and models himself after them. It is where non-Indian attitudes and behaviour are not supportive of this initial process, that the discontinuity of socialization is most evident. An attitude that further complicates this problem is as Hawthorn suggests: that in general, the Indian Community and child's parents do not see school achievement as essential to the child's future success. In summary, Hawthorn defined the process resulting in low perceived opportunity, poor self-image, increasing negativism, and diminishing motivation as having the following components:

- i) discontinuity of socialization
- ii) repeated failure
- iii) discrimination
- iv) lack of significance of educational processes

This process may also be seen to result in an identity crisis for the native child. Once the child becomes aware of his unequal opportunity he usually becomes discouraged and quickly loses interest in school-learning activities. This pattern of activity is very close to Cloward & Ohlin's concept of perceived opportunity for success and its behavioural counterpart.¹ Merton has also discussed the situation where a discrepancy in accessibility of goals and the means for obtaining these goals occurs.² This model is a hypothesized explanation of types of deviant behaviour, and can certainly be applied to the social situation of native youth. Some types of deviant behaviour that Merton's model treats include retreatism and rebellion, which clearly describe some native youth behaviour. Many youth may be seen to portray a defeatist attitude in terms of school when they perceive their opportunity or chances for success as low. Hawthorn (1966) found that the Indian youths' stated aspirations reflected internalized middle class goals which they realized were out of their reach, because their corresponding perceptions of opportunity for attaining these goals were low. Along with this the process of self-estrangement becomes evident; that is, where there is a gap between the ideal and real self (the ideal self being a non-native student).

A similar situation exists in terms of native youth employment. Discrimination against natives has resulted because of employers' unfavorable experiences with native employees. This process has developed an unfavorable

1 Cloward, R.A. and L.E. Ohlin, 1960, Delinquency and Opportunity, New York: The Free Press.

2 Merton, R.K., 1957, Social Theory and Social Structure, Chicago: The Free Press.

stereotype of the Indian worker, who in reacting to the employers' treatment and expectation, have in turn developed attitudes and behaviour that tend to reinforce this stereotype. These processes are very related to the concept of the self-fulfilling prophecy (Schwartz & Skolnick; Davis; and Hackler)¹. The self-fulfilling prophecy is an extension of Cooley's classical concept of the "looking glass self".² Here Cooley describes the process of acquisition of self where an individual behaves in a manner that is formed by his perceptions of his relationships with important others. Videbeck (1967) also suggests that self-conceptions are learned through our perceptions of the evaluative reactions of others.³

This literature clearly suggests that an individual will react to fit his behaviour to his perceptions of his important others' expectations. The native youth employees may be reacting to their perceptions of what others expect of them. If the native youth perceives that his employer expects him to be unreliable and undependable, he may well react to fit his behaviour to his employer's perceived expectations. In correspondence to this, it is interesting to note that Hawthorn found teachers and administrators don't expect native children to perform well in school and view them mainly as under-achievers.

Lagasse (1959) has offered another interesting view of why the native employees are viewed negatively. He suggests that any casual employee

-
- 1 Schwartz, R.D. and J.H. Skolnick, 1964 "Two Studies of Legal Stigma" in H.S. Becker (editor) The Other Side, New York: The Free Press, pp. 103-117.
Davis, Fred, 1964, "Deviance Disavowed: The Management of Strained Interaction by the Visibly Handicapped", in H.S. Becker (editor), The Other Side, New York: The Free Press, pp. 119-137.
Hackler, J.C., 1968 "Predictions of Deviant Behaviour: Norms vs the Perceived Anticipations of Others", The Canadian Review of Sociology and Anthropology, Vol. 5 (May) #2, pp. 99-106.
 - 2 Cooley, C.H., 1902, Human Nature and Social Order, New York: Scribners
 - 3 Videbeck, R., 1967, "Self-Conception and the Reactions of Others", in J.G. Manis and B.N. Mutzer (editors), Symbolic Interactions: A Reader in Social Psychology, Boston: Allyn and Bacon, pp. 270-299.

(regardless of ethnic background) has difficulty developing a sense of responsibility on a short-term job. This contributes to the employer's opinion that casual workers are not reliable. However, this also applies to all casual workers and not only Indians and Metis.

ASSIMILATION

Directly related to the question of needs (especially identity) is the question of assimilation of natives into Canadian culture.

Hawthorn (1966) has stated that the Indians should not be required to assimilate. He feels that the native population should be able to preserve their ethnic identification, and still successfully participate in Canadian society. In demanding assimilation, there is the possibility of changing the native youth's personality. Also, as Hawthorn pointed out there are many natives who desire to maintain an Indian ethnic identity. The important question here is, what differentiates between those natives who wish to maintain their native identity, and those who do not?

It is common and well documented knowledge that natives have strong feelings of tribal and familial affiliation, which play an important part in their emotional and social security. Along with this affiliation come kin and tribal obligations and reciprocity which affect the lives of all the group members, in contrast with the majority of non-native Canadian society where these relationships do not exist in large groups. This changes the focus of the question from integration of the native individual to the integration, acceptance, and participation of native groups.

In conclusion, Wintrob (1968) has suggested that the major problem of native youth is their search for identity.¹ This situation is a function of a number of factors:

- i) the difference in cultural values between native and non-native populations .
- ii) the view that education is a threat to the authority of the family and tribe (Wintrob, 1968: 102)
- iii) the socialization process of the school versus the home
- iv) the discrepancy between an ideal and real self

Wintrob has also suggested that since the traditional identity model is clearly dominant, tendencies toward the rejection of the model cause feelings of anxiety. The clearest situation where the traditional identity model is threatened is in the school situation.

SUMMARY

The above discussion of relevant issues suggests that native and non-native populations have both common and different needs. The native needs are peculiar to their experience in the non-native milieu.

Some related concepts have also been suggested from previous research, such as: perceived opportunity, alienation, assimilation, identity crisis, discrepancy between goals and means, self-fulfilling prophecy, discrimination, desire for independence and closeness of relationship with important others. These concepts will be dealt with in more detail in the following chapter.

1 Wintrob, Ronald, 1968, "Acculturation, Identification and Psychopathology Among Cree Indian Youth", in N.A. Chance (editor), Conflict in Culture: Problems of Developmental Change Among the Cree, Ottawa, Canada: Canadian Research Centre for Anthropology, pp. 93-104.

CHAPTER III

THE RESEARCH DESIGN

This chapter presents a description of the research method, which will include a discussion of the major concepts and related variables. Directly related to this will be a discussion of the hypotheses, both descriptive and statistical.

A. The Research Method and Methodology

Since the major purpose of this study is to determine the needs of native youth in Edmonton, and to assess the resources needed to meet their needs, the research carried out was an exploratory and descriptive survey of known and/or identifiable native youth. The initial objectives defined the prime importance of the study as describing the needs of the native youth by exploratory methods, and therefore a descriptively oriented survey was seen as best suited to this research task. However, along with the descriptive objectives and hypotheses (see below) a number of a priori descriptive and statistical hypotheses were also suggested.

Native Youth Sample

Dr. Card's study of the "numbers and distribution of native Canadian youth in Edmonton" surveyed the native youth population.¹ From this study, a sample of approximately 300 Edmonton native youth residents were selected for an intensive interview survey. The exact sampling procedure that was carried out is presented in Appendix A. Of the 300 originally sampled, 143 residents of Edmonton were actually interviewed. The reasons for the reduced size of the sample are discussed in Appendix B. Along with the Edmonton residents,

1 Card, B.Y., 1970, Op. Cit.

one institutionalized respondent (and not an actual resident), and 80 transient respondents were also interviewed. This suggests the question of the inference of this study's results. Table 3:1 presents a comparison of the initial (N=300) and obtained (N=143) Edmonton resident native youth, and then a comparison of these two samples to the identified population is also presented.

TABLE 3:1

Comparison of Estimated Population With Initial and Obtained Native
Samples by Stratification Characteristics

<u>Age</u>	<u>Initial</u>		<u>Obtained</u>		<u>Obtained Adjusting for N.R.</u>		<u>Identified Population ¹</u>	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Under 20	251	83.7	118	82.6	118	93.6	614	92.7
Over 20	49	16.3	8	5.6	8	6.4	48	7.3
Non-response	NA	-----	17	11.8	NA	-----	NA	-----
TOTAL N	300	100.0	143	100.0	126	100.0	662	100.0
<u>Sex</u>								
Male	147	49.0	62	43.4	62	44.3	300	45.3
Female	153	51.0	78	54.5	78	55.7	362	54.7
Non-response	NA	-----	3	2.0	NA	-----	NA	-----
TOTAL N	300	100.0	143	100.0	140	100.0	662	100.0
<u>Type of Native</u>								
Treaty	138	46.0	47	32.9	47	34.3	269	40.6
Metis	162	54.0	85	59.4	85	62.0	383	57.9
Other	NA	-----	5	3.5	5	3.6	10	1.5
Non-response	NA	-----	6	4.2	NA	-----	NA	-----
TOTAL N	190	100.0	143	100.0	137	100.0	662	100.0
<u>School Type ²</u>								
Public	96	32.0	NOT	AVAILABLE	-----		211	31.9
Separate	177	59.0	"	"			413	62.4
Other	27	9.0	"	"			38	5.7
TOTAL N	300	100.0					662	100.0

1 B.Y. Card, An Exploratory Survey of the Numbers and Distributions of Native Canadian Youth Between the Ages of Twelve and Twenty-Five in the City of Edmonton, During May, 1970, Research Division of Alberta Department of Youth.

2 The school type data for the obtained native youth sample is not available because the coding categories of the native youth data present overlapping public and separate junior high school data.

The data in Table 3:1 suggest that the initial and obtained samples are almost identical. There are a few differences, but these are minimal. Where the minimal differences occur between the initial and obtained data, and when the obtained data is adjusted by excluding the non-responses from the total N, the obtained data becomes even more like the identified population data than the initially selected sample (see the age and sex categories).

This analysis suggests that the obtained Edmonton resident native youth sample data is representative of both the initially selected random sample of 300, and the identified population base of 662. The obtained sample data, therefore, seems to be a random sample of the original selected sample and the identified population. The fact that 21.6% of the identified population was sampled, also reduces the possibility of a sampling bias. Therefore, the results for this study of Edmonton native youth will be inferred back to the total population of native youth in Edmonton.

Interviewing

It was requested by the Native Youth Advisory Committee that the interviewing for the native youth survey be carried out by native interviewers under the supervision of L. Lamothe and his assistants. This was requested in order to ensure spontaneous and open native youth responses to the survey questions. The interviewing stage of the project may have been a major source of data bias, however the native interviewing probably resulted in more honest respondent answers. The interviewing was carried out during the period from the first week in June until the second week in September, 1970. The interview schedule administered is presented in Appendix C.

Non-Native Control Sample

A control sample of non-native youth (190) was acquired in January, 1971. The sampling procedures used in selecting this sample are outlined in Appendix D. The non-native control sample is characterized as ranging in age from 11 to 19, attending public and separate schools, representative of the non-native city residents (from most parts of the city), and comparable to the native sample in demographic characteristics.

A questionnaire was administered to sixteen classrooms in six public and ten separate schools. Appendix E presents the schools, location by section of city, school address, and grade of the selected non-native control sample. Also, the map of the city divided into eight sections is presented in Appendix F. The control sample classes were selected on the basis of the grade and area of school characteristics of the native youth. All the schools contacted and used were very cooperative and helpful. Four research assistants and officers administered the questionnaire to total classes of students at times decided by appointment. The instructions read out loud by those administering the questionnaire are presented in Appendix G. The original native youth sample interview schedule was modified into a questionnaire to be administered to the control groups of students. This questionnaire is reproduced in Appendix H. When it was decided that a particular class (grades 5 to 8) would have difficulty with a self-administered questionnaire the administrator handed out the questionnaires to the class and then proceeded to read the questions out loud, clarifying and answering questions as the group interview proceeded. From over 400 questionnaires obtained, 190 complete questionnaires were randomly selected from the classes to fit the quota of male and female previously determined by the native youth characteristics.¹

1 See Appendix D for a more extensive discussion of the selection of the non-native youth sample.

The usefulness of the control sample is most evident in terms of determining whether the needs and characteristics of native youth in Edmonton are peculiar to them. This is directly applicable to determining whether recommended action should be taken if the needs of the youth researched are not being met, in terms of native youth or all youth. The following analyses in Chapters IV to IX are particularly relevant to this issue.

B. Concepts and Corresponding Variables

It was suggested in Chapter II that eight specific concepts seem to be relevant to the native youth situation. Some of these concepts were suggested to be: perceived opportunity, alienation, assimilation, identity crisis (and identification), discrepancy between goals and means, discrimination and closeness of relationship. These concepts and their corresponding variables are briefly discussed below.¹ The variables used to measure these concepts will be different for the two sub-samples of the native youth sample: i) the students, and ii) the transients (which includes some non-resident students).

Perceived opportunity (and Discrepancy between Goals and Means)

Perceived opportunity is defined as the youth's perceptions of his chances or likelihood of succeeding (educationally, occupationally, economically, etc.). These perceptions are viewed in terms of his environment, and others' perceptions of him (Cloward and Ohlin, 1960). The concept of discrepancy between goals and means is directly related to the concept of perceived opportunity in terms of operationalization. However, the theoretical difference in these two concepts seems evident in that "perceived" opportunity is the conscious process of the individual's perceptions while the discrepancy between goals and means may not be conscious (as perceived) by the individual.

1 The relationships between the concepts isolated and the variables used to measure these concepts were not determined or implemented by the present researcher. The definitions presented are a product of the present researcher's understanding of the a priori hypotheses, research objectives, and knowledge of the concepts involved.

These concepts will be measured by items such as:

"If presently employed:

- i) What are your chances for promotion?
- ii) How are your chances of getting a better job?
- iii) What are your chances of being fired or laid off?
- iv) How much would you like to get a better job?"

"Have you trouble finding employment?"

"Do you hope to master some skill?"

"What grade level do you hope to achieve?"

"Why do you find that level of learning sufficient?"

These questions are measuring perceived occupational advancement, desire for advancement, perceived employability, perceived ambition, and perceived educational opportunity.

Alienation, Adjustment and Identity Crisis

The concept of alienation has been extensively discussed by Marx and Fromm.¹ Marx has specifically defined alienation as the estrangement of a worker from his work. In this study we are more directly dealing with self-estrangement which suggests a sense of isolation and low self-worth. Alienation also suggests a loss of control over life style, freedom, initiative and creativity; a loss of the meaningfulness of life, and a degradation of self.

The alienation concept is also closely linked to the concepts of adjustment and identity crisis. Adjustment is self-explanatory, in terms of an individual's coping with or adapting to his present situation. The term carries the connotation of "doing the best with what he's got and where he is".

1 E. Fromm, Marx's Concept of Man, New York: Ungar, 1961.

An adjustment can be seen when an individual is presented with a different or new situation and is perceived to function adequately.

According to Marx's model, both the identity crisis and alienation concepts suggest personal and self-disorganization. Through the process of identification an individual admires and wishes to model himself after another individual, and therefore acquires an identity.¹ If in another milieu or situation the individual is presented with a conflicting or non-supportive identity, a personal crisis develops. Mead has defined the conception of self as an organization of socially derived and symbolically represented self-identification.² If two self-identifications are not complementary, then one may have to be rejected.

These concepts were measured by the following survey items:

Alienation: for example -

Feeling of need to be alone

No need of having friends around

Not liking some basic goods in life

Adjustment to School:

- i) perception of other students
- ii) like subjects
- iii) perception of subjects' usefulness
- iv) perception of subjects' difficulty
- v) perception of place in school
- vi) perception of administration
- vii) perception of guidance counsellors
- viii) perception of teachers

1 Winch, R.R., 1962, Identification and Its Familial Determinants, Indianapolis, Robbs-Merrill.

2 Mead, G.E., Mind, Self and Society, Chicago: University of Chicago Press, 1934.

Assimilation and Integration

The concept of assimilation has been traditionally defined as the process by which the "identity of groups is based".¹ Park and Burgess (1924) traditional American Sociologists suggest a classical definition of assimilation as: a complete and gradual transformation of personality.² Integration is defined as involvement and participation into the larger group's structure and activities, but not a corresponding change of self or loss of distinct individual characteristics. These definitions clarify the major differences between integration and assimilation, where integration encompasses participation and involvement while assimilation describes the process of loss of individual identity and differences within the group's structure and identity.

Prodipto (1962) has implemented these definitions in his research of assimilation of the Spokane Indians.³ The measurement of assimilation was implemented in three ways:

- i) Acculturation -- measured by socio-economic status variables;
- ii) Social integration -- measured by the extent the Indians had integrated into the formal institutional systems which were set up primarily for the group and cleavage in voluntary organizations; and
- iii) Amalgamation -- measured by the percentage of white industry among Indians; directly related to education, level of living and income.

In the present study, assimilation will be measured in the "social integration" sense only. The following survey items were used to measure this concept:

- For example:
- i) Speak native tongue
 - ii) Participation in community league
 - iii) Desire to integrate
 - iv) Prefer to live in Edmonton
 - v) Prefer to keep traditional way of life
 - vi) Prefer life in city versus reserve
 - vii) Desire to learn and practice native traditions in city.

1 Broom, L. and P. Selznick, Sociology: A Text with Adapted Readings, New York: Harper and Row, 1963, p. 34.

2 Park, R.E. and E.W. Burgess, Introduction to the Science of Sociology, Chicago: University of Chicago Press, 1924, p. 510.

3 Prodipto, Roy, "The Measurement of Assimilation: The Spokane Indian", AJS, Vol. 67, #2 (March) 1962, pp. 541-551.

Discrimination

Rose, (1961) defines discrimination as:

"the majority groups not allowing members of the minority group to have the same or equivalent opportunities as are afforded members of the majority group." ¹

The discrimination defined by Rose is restricted to that "which comes into operation solely because of an individual's race, language, religion, or national origin, and not because of his ability, manners, personality, wealth, or anything else." Rose also suggested that discrimination could be defined in terms of economic, legal, political and social relations.

The definition suggested by Rose is applied to this study. The items used to measure discrimination or "perception of discrimination" are:

- For example:
- i) Edmontonians avoid you
 - ii) Trouble finding housing
 - iii) Trouble finding employment
 - iv) Hassled in street
 - v) Humiliating example by teachers
 - vi) Perception of teacher punishment

Closeness of Relationship

This concept has been used by a number of other sources. ² Dentler and Monroe (1961) described the closeness of relationship as confidence and intimacy level. Here the operational definition of this concept is restricted by items used to measure it:

-
- 1 Rose, A.M., "Race and Ethnic Relations" in R.K. Merton and R.A. Nesbitt (editors) Contemporary Social Problems, New York: Harcourt, Brace & World, Inc., 1961, pp. 324-389.
 - 2 See Theoretical discussion in: Siperko, G.M. Burima, "The Relationship of Neighborhood and Parental Social Control to Teenage Misbehaviour", Unpublished M.A. Thesis, Fall, 1970, University of Alberta, Edmonton.
Dentler, R.A. & L.J. Monroe, "Social Correlations of Early Adolescent Theft", ASR, 1961, pp. 733-743.

- "Where do you go when you:
- a) have emotional troubles (problems)?
 - b) are lonely?
 - c) are frustrated?
 - d) are in trouble?
 - e) are broke?
 - f) need advice?

"Have you ever developed some close interpersonal relationships with other people?"

Along with these specific psychological variables, some other items measure the general psychological and attitudinal profiles of the respondents toward people in Edmonton, police, themselves, and others in general. For example: happiness, satisfaction with circumstances, desire for independence, ambition, desire for recognition, acceptance of self, conformity. These items help define the social, psychological and emotional needs of the respondents.

Also, some general demographic characteristics were isolated for each respondent. These items were:

- 1) Location of residence, by section of the city
- 2) type of respondent
- 3) school attendance
- 4) type of school attended
- 5) age
- 6) course of study
- 7) residence
- 8) residence mobility
- 9) previous residence
- 10) type of native
- 11) native ancestry
- 12) speaking of native tongue
- 13) living with
- 14) family members
- 15) number of children in family
- 16) number of children at home
- 17) presence of non-family member in home
- 18) number of youth in home
- 19) school grade
- 20) linguistic group
- 21) subject sex

Three additional major areas of information were isolated in terms of the initial research objectives. These areas are:

- 1) agency information variables
- 2) education information variables
- 3) employment information variables
 - a) student employment
 - b) non-student employment
 - c) summer activities

C. The Hypotheses

Two types of a priori hypotheses were derived from the research objectives and concepts isolated. The descriptive hypotheses state the expected association of concepts and predicted relationships in terms of native youth needs and characteristics. No causal inferences are made at this time, for only the strength of the relationships between variables is discussed. The descriptive hypotheses are restricted to group analysis and do not refer to individuals. Also, these hypotheses refer to an analysis of the total student sample controlling for native ancestry. The statistical hypotheses define the characteristics of the native youth student sample in terms of the non-native youth student sample.

Descriptive Hypotheses

- 1) The index of perception of adequacy of resources (educational and agency) to meet needs will be strongly and positively related to the index of adjustment.
- 2) The perception of adequacy of resources (educational and agency) to meet needs will be strongly and negatively related to the unhappiness of youth.
- 3) There will be a strong and positive relationship between closeness of relationship to family and adjustment.

- 4) There will be a strong and negative relationship between the summer unemployment and perceived adequacy of resources (educational and agency) to meet needs.
- 5) Perceived opportunity will be strongly and negatively related to alienation and discrimination.
- 6) There will be a strong relationship between adjustment factors and general personality variables.
- 7) There will be a strong and positive relationship between intactness of home and adjustment.

Statistical Hypotheses

General Hypotheses I:

The general personal characteristics of native youth will not differ significantly from the general personal characteristics of non-native youth. However, there will be specific characteristics that will differentiate the two groups from each other.

- 1) The native youth will have significantly lower perceived opportunity, adjustment, and perceived assimilation than the non-native youth.
- 2) The native youth will be significantly higher than the non-native youth in terms of alienation and discrimination.
- 3) The degree of closeness of relationship between the native youth and their parents will be significantly higher than that between non-native youth and their parents.

4) The two samples will not differ significantly in terms of the following general personality items: desire for independence, and possession of a good sense of humor.

5) The two samples will differ significantly in terms of: desire for recognition, ambition, acceptance of self, and conformity.

General Hypotheses II:

The perceived general needs and the realization of these needs for native students will not differ significantly from the perceived general needs and realization of these needs for the non-native youth. However, there will be specific needs associated with differentiating personality characteristics for the two samples.

Specifically:

6) The perceptions of the adequacy of resources (educational and agency) to meet needs will be the same for the two school samples.

7) The reasons considered for leaving school will be the same for the two samples.

8) The extent and character of employment (summer and student), will be the same for the two samples.

9) The amount of agency contact will be significantly different for the two samples (more in terms of the native youth sample).

10) The educational goals and needs will be significantly different for the two samples.

11) The part-time student occupations will not be significantly different for the two samples.

D. Limitations

Some specific limitations to this present study have already been suggested. These limitations and some additional limitations are briefly listed here:

- 1) A strong theoretical rationale was not present at the initial stages of the research project, which made some of the later stages of the research more difficult.
- 2) Open-ended questions, and some ambiguous questions on the survey instrument, thus introducing instrument bias.
- 3) The necessity of having native interviewers to reach the native youth population in an attempt to achieve honest and spontaneous answers, placed some limitations on the training of interviewers and the quality of professional interviewing.
- 4) Accidental sampling - since only 143 (out of the original selected sample of 300 native youth students) were interviewed, these 143 could have been a select sample. The selection occurred in terms of remaining in the city during the summer, not dropping out of school, being easily accessible (low mobility), etc.. The inference of the results based on the representation of the population in the sample is discussed above in pages 13 to 16.
- 5) Incomplete interview schedules and questionnaires.
- 6) Inadequate control on quality of responses to survey items, and therefore inadequate control over response bias, social desirability, perceived expected responses, etc.
- 7) Coding error due to inexperienced personnel and lack of continuing control on error rates and type of error. This may have resulted in some consistent error, but mainly random error. The coders were required to interpret many of the interview items because of the unstructured, open-ended (and sometimes ambiguous) questions, which contributed to some coding error.

8. Data Analysis - Misinterpretation of data. At this stage, the above limitations must be considered. This helps determine the rigorousness of the tests of significance and what level of assumptions can be met. Therefore, the most conservative interpretation of the data was used where possible.

CHAPTER IV

DATA ANALYSIS

INTRODUCTION

The data analysis will be carried out in two parts:

PART I A descriptive analysis of the demographic and need concepts and variables; which includes the agency, education, employment, and social areas.

PART II A. The testing of the a priori descriptive hypotheses defined in Chapter III.

B. The testing of the a priori statistical hypotheses as defined in Chapter III.

This present chapter will describe the data analysis methods for each part. An analysis was separately carried out on some items for the transient native-youth samples. When the native youth and non-native youth samples were compared in terms of the hypotheses and objectives, only the native-youth student sample was used.

Part I - Descriptive Analysis

The descriptive analysis was carried out by a content analysis in terms of demographic variables and need concepts.

A. Demographic Variables

The content analysis was carried out in terms of the demographic characteristics of the native youth, and the results were also compared with the characteristics of the non-native youth control sample. The following list

of variables defines these demographic characteristics, applicable to both samples:

1. location of school attended, by section of the city
2. type of respondent
3. school attended
4. type of school attended
5. age
6. course of study
7. residence, resident of city versus non-resident
8. residence mobility
9. previous residence
10. living arrangements
11. family members
12. family size
13. presence of non-family members in home
14. number of youth in home
15. school grade
16. subjects' sex

The following variables were applicable only to the native youth population:

1. type of native
2. native ancestry
3. linguistic group
4. use of native tongue

Need Concepts

A content analysis was also carried out in terms of native youth and non-native youth needs. This analysis was carried out in the following areas:

- A. Agency information
- B. Education information
- C. Employment information
- D. Social information and general proto-type factors

The major questions looked at were defined by the objectives outlined in Chapter I.

Agency Information:

- 1) Determine the resources available to meet needs.
- 2) Determine the adequacy of resources:
 - a) perception of whether agencies are meeting youths' needs.
 - b) are there enough agencies (quantity).
 - c) quality of services.
- 3) Suggest recommendations to make up for inadequacy of agency services in specific areas:
 - a) future expansion
 - b) development of youth serving agencies

Education Information:

- 4) Determine under what circumstances natives consider leaving school.
- 5) Determine the attitudes of native youth towards school structure, administration and fellow students.
- 6) Determine the native youth educational goals and needs.
- 7) Assess if the educational system (curriculum) is meeting perceived educational needs and goals of the native youth.
- 8) If the curriculum isn't meeting the needs of the native youth, determine how the curriculum can be changed.

Employment Information:

- 9) Determine the character and extent of native youth employment:
 - a) non-student employment
 - b) student employment
 - c) job satisfaction and chances for promotion
 - d) student summer employment
 - e) summer unemployment
- 10) Determine reasons for unemployment.
- 11) Determine procedures used for finding jobs in past.
- 12) Determine extent of difficulty in finding employment.

Social Information:

- 13) Determine the native transient youth factor structure.
- 14) Determine the native student factor structure.
- 15) Determine the non-native student factor structures.
- 16) Compare the factor structures of the native and non-native samples, and isolate peculiar characteristics of each sample.
- 17) Describe the perceived needs of the native and non-native youth.

The content analysis consisted of presenting the frequency of respondents that fit into certain response categories. Where applicable response categories were not available, these responses were grouped into new categories. The object of setting up the response categories was an attempt to simplify and group responses into a meaningful structure.

Through this analysis the needs of the native youth sample were inferred and compared to the needs of the non-native youth control sample.

The Kolmogorov-Smirnov two sample test was used to test for statistical significance of differences for $2 \times 3 \dots 2 \times n$ tables, and the Chi^2 two sample test of significant differences was used for the 2×2 tables. This analysis of testing for significant differences is part of the statistical analysis specified by the statistical hypotheses (Part II).¹

Part II - The Testing of A Priori Descriptive and Statistical Hypotheses

The descriptive hypotheses are outlined in Chapter III above. The specific concepts that were isolated in these hypotheses were:

- 1) perception of adequacy of educational resources
- 2) perception of adequacy of agency resources
- 3) index of adjustment
- 4) unhappiness index
- 5) ethnicity
- 6) closeness of relationship to family
- 7) summer employment index
- 8) index of perceived opportunity
- 9) alienation index
- 10) discrimination index
- 11) general personality factors i.e. perception of conformity, independence, acceptance of self, personal achievement, possession of sense of humor.
- 12) intactness of home
- 13) assimilation index
- 14) general life attitude, social attitude

1 Seigel, S., Non-Parametric Statistics: For the Behavioural Sciences, New York: McGraw-Hill Book Co., Inc., pp. 127-136, 1956.

Blalock, H.M., Jr., 1960, Social Statistics, New York: McGraw-Hill Book Co., Inc.

For each sample (native transient and student, non-native and total student) variables that were initially thought to be measuring these concepts were isolated. Frequency distributions were run on the data to eliminate high non-response rate items and highly skewed data. These items were also consistently recoded to represent continuous dimensions from low to high, etc., and then intercorrelated (Pearson's r).

A principal component analysis with an orthogonal (varimax) rotation computer program was then run on the separate samples in order to isolate the proto-type factors.¹ The isolated factors are called proto-type factors because they have not been tested on data for other samples, and therefore, the reliability and validity of these factors is not known. The labels of each factor are significant only in attempting to conceptually link the factorially related variables to the proto-type factor structure. A further discussion of the factor analysis method used is presented in Chapter IX. Once the proto-type factors were isolated for each sample, the factor structures of the native and non-native student samples were compared to isolate the peculiar characteristics of each sample.

However, the major utility of the component analysis was realized in reducing the large number of individual variables into statistically homogeneous factors and corresponding indices.² This defines component analysis as a data reduction method, statistically combining the variables into components explaining the maximum of the variance in the data. Harman (1967), a well known

1 Division of Educational Research Services factor analysis program, Fact01.

2 For a clear discussion of the factor analysis method, please refer to SPSS Manual, Statistical Package for the Social Sciences, Nie, N., D.H. Bent and C.H. Hull, 1970, Toronto: McGraw-Hill Book Co., Inc.

and accepted source on factor analysis, defines component analysis as:

"An empirical method for the reduction of a large body of data so that a maximum of the variance is extracted. An important property of this method, insofar as the summarization of data is concerned, is that each component, in turn, makes a maximum contribution to the sum of the variances of the n variables."¹

All the components present the correlations among the contributing variables to compose the variance extracted. The results of the component analysis are presented in Chapter IX, along with a description of the factors isolated for each sample.

A factor-score program (Bartlett's method) was used to score each individual on the isolated factors.² A frequency count of the factor scores was made, which defined approximately one-half to one-third of the student samples in the medium category of each factor (within one-half S.D. of the mean). The rest of the respondents were recoded as high or low according to the sign (+ or -) of the standard deviation of .500 or greater. This was done in order to make the factor score data comparable to the variable data, which enabled correlation analysis. The correlation analysis (gamma correlations) using up to two control variables was used to test the descriptive and statistical hypotheses.

The combination of descriptive and component (and accompanying statistical) analyses was used in an attempt to clarify the complexity of the data. The descriptive analysis will present simple observed relationships based on each separate variable, whereas the component analysis will present the latent

1 Harman, Harry H., 1967, Modern Factor Analysis, Chicago: The University of Chicago Press, p. 15.

2 Program developed by Dale Burnett, Division of Educational Research Services, University of Alberta, Edmonton. The factor score formula is $F = Z^* (U^{*-2})^* A^* (INV) (A \text{ transpose})^* (U^{*-2})^* A)$

structure relationships of combinations of variables (resulting in components).

B. The A Priori Statistical Hypotheses

The a priori statistical hypotheses are presented above in Chapter III. These hypotheses were presented to give statistical strength to the findings from Part I.

The same variables are used in Part II as in Part I, with the addition of some descriptive concepts. For example:

- 1) reasons for leaving school
- 2) extent and character of employment
- 3) social attitudes toward police and Edmontonians in general
- 4) amount of agency contact
- 5) educational goals and needs
- 6) part-time student occupations

The two general statistical hypotheses stated that there would be significantly different (1) personality characteristics and (2) needs for the two samples. Therefore, the hypotheses were stated to define the peculiarity of the native youth needs and characteristics in terms of a non-native sample.

PART I

CHAPTER V

THE DEMOGRAPHIC CHARACTERISTICS OF THE NATIVE YOUTH SAMPLE

This chapter is concerned with presenting a demographic analysis of the characteristics of the native youth sample. This analysis will then be compared to an analysis of the non-native youth sample characteristics.

Another major purpose of the analysis in this chapter is to determine whether the two student samples are statistically equivalent in their demographic characteristics. Therefore, the comparability of these two samples will be assessed and the items that are strongly related to the ethnicity factor will be isolated.

The transient respondent category in the native youth sample refers to native youth of no fixed address in Edmonton, who are from outside Edmonton, and passing through the city.

Location of School Attended

TABLE 5:1

Location of School Attended, by Section of the City¹

<u>Section of City</u>	<u>Native Youth Students</u>		<u>Non-Native Youth</u>		
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	
1	28	21.7	46	27.2	
2	25	19.4	13	6.8	
3	21	16.3	24	12.6	
4	1	.01	-	-	
5	17	13.2	21	11.0	
6	15	11.6	36	18.9	
7	6	4.7	11	5.8	
8	14	10.9	39	20.5	
TOTAL	<u>127</u>	<u>100.0%</u>	<u>190</u>	<u>100.0%</u>	$P < .05^2$
NON-RESPONSE	16	N.A.	0	N.A.	

1 Location of school attended, which is highly correlated with residence location

2 Kolmogorov-Smirnov two sample test for significant differences

A map of the city divided into eight sections is presented in Appendix F.

It can be seen from Table 5:1 that the two samples' location of school attended is generally equivalent. The major difference of locations occurs in Sections 2 and 8 ($P < .05$). Since the criterion of selection of the control sample was location of school, type of school, and grade, all three factors were equally considered in the selection, which is part of the reason for this difference. However, the main reason for the difference in Sections 2 and 8 was the low level of complete responses in Section 2, and therefore it was attempted to reduce the number of incomplete responses by selecting more respondents in the same grade but in a different section of the city.

Type of Respondent

The native youth sample is composed of 143 students, 80 transients and one handicapped. The non-native youth control sample is composed of 190 public and separate school students in grades 5 to 12. The native youth student sample is also composed of public and separate school students in grades 5 to 12.

School Attendance

Of the native youth sample, eighty (35.7%) are transients, seven (31.%) are part time students and 124 (55.4%) are full-time students.¹ All 190 of the non-native control sample are full-time students.

¹ The remainder of the respondents did not answer this survey item (5.8%)

Type of School Attended

TABLE 5:2

<u>Type of School Attended</u>				
<u>Type of School</u>	<u>Native Sample</u>		<u>Non-Native Sample</u>	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Public High & Junior High	12	9.3	21	11.0
Public Elementary	9	6.8	12	6.3
Separate and Public Combined Elementary & Jr. High	74	57.4	106	55.8
Separate High & Jr. High	27	20.9	31	16.3
Separate Elementary	7	5.4	20	10.5
TOTAL	<u>129</u>	<u>100.0%</u>	<u>190</u>	<u>100.0%</u>
NON-RESPONSE	14	N.A.	0	N.A.

P ≈ .05

It can be seen from Table 5:2 that the two samples are similarly characterized by type of school attended. This is mainly explained by the fact that the non-native youth sample was selected on this criteria.

Age

The age structures of the student and transient (non-student) samples are presented in Table 5:3, along with the age structure of the non-native youth sample.

TABLE 5:3

Age Structure of Samples

<u>Age</u>	Native Youth				Non-Native Youth	
	Transient		Student		<u>N</u>	<u>%</u>
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>		
12 to 13	-	-	48	33.6	114	60.0
14 to 15	3	3.7	42	29.4	51	26.8
16 to 17	9	11.1	17	11.9	20	10.5
18 to 19	11	13.6	11	7.7	5	2.6
20 to 21	13	16.0	7	4.9	-	-
22 to 23	9	11.1	1	0.7	-	-
24 to 25	9	11.1	-	-	-	-
25 +	11	13.6	-	-	-	-
Non-response	0	0	17	11.9	0	0
TOTAL	81	100.0%	143	100.0%	190	100.0%

Mean Age 21.2 14.6 13.3 P < .05

The data in Table 5:3 suggest that the non-native youth sample is over-represented by the younger age group (ages 12 to 13), and the mean age for the non-native youth is also lower than the mean age for the native youth ($P < .05$). This was necessary in order to control for grade in school. From Table 5:4 below, it can be seen that the grade structures of the two samples are much more comparable ($P > .05$), and in fact the upper grades are slightly over-represented in the non-native sample. When looking at the mean ages of each sub-sample, it can be seen that the transient native youth actually come from another generation.

The over-representation in the younger age group (12 to 13) of the non-native sample, can be controlled for in the later analysis. The fact that the age composition for the two samples is not comparable while the

grade composition is, can be explained by the expectation and fact that native youth start to school later and stay in one grade longer than average non-native youth.

The data in Table 5:3 also gives an example of the non-comparability of the native youth transient sample with the non-native youth sample. The majority (51.8%) of the native transients are in the age bracket of 20 to 25 while the majority (60%) of the non-native students are in the age bracket of 13 or less.

School Grade

This demographic characteristic applies only to the two school samples, native and non-native, and the analysis is presented in Table 5:4 below.

TABLE 5:4

School Grade of Respondents

<u>Grade</u>	Native Youth		Non-Native Youth	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
6 and under	36	27.9	61	32.1
7 and 8	47	36.4	62	32.6
9	13	10.1	30	15.8
10 and 11	10	7.8	25	13.2
12	10	7.8	12	6.3
	<hr/>	<hr/>	<hr/>	<hr/>
TOTAL	<u>116</u>	<u>100.0%</u>	<u>190</u>	<u>100.0%</u>
NON-RESPONSE	27	N.A.	0	N.A.

P > .05

Mean Grade Level

7.6

7.8

The data in Table 5:4 suggests that the two samples are generally comparable in terms of school grade, because the non-native control sample

was selected on this criteria ($P = \text{non-significant}$). The major difference in the grade composition is seen in grades 9, 10 and 11. This occurred because of the additional selective criterion of type of school and location of school, and the fact that only one class grade per location of school and type was selected. The mean grade level of each sample is almost equivalent.

The major implication that can be drawn from the data in Tables 5:3 and 5:4 is that the natives and non-natives are not comparable in grade level when holding age constant. This defines the native youth student sample as generally older than the non-native student sample at a comparable grade.

Subjects' Sex

Table 5:5 below presents the distribution of the two native and one non-native youth samples by sex.

TABLE 5:5

Sex of Respondents

<u>Sex</u>	<u>Native Youth Sample</u>		<u>Native Students</u>		<u>Non-Native Sample</u>	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Male	118	52.7	62	43.4	96	50.5
Female	102	45.5	78	54.5	94	49.5
Non-response	4	1.8	3	2.1	0	0.0
TOTAL	224	100.0%	143	100.0%	190	100.0%

$P > .05^1$

¹ Chi² two sample test for significant differences

On the basis of the data for the two total samples, the proportion of males to females is approximately the same (52.7:45.5 versus 50.5:49.5; $P = \text{non-significant}$). Where the two student samples are compared, there is

a slight over-representation of females in the native student sample. However, the two student samples are similar enough to be compared without controlling for this variable.

Course of Study

The "course of study" characteristic applies only to the students of both samples.

TABLE 5:6

Course of Study of Student Samples

<u>Course of Study</u>	Native Youth		Non-Native Youth	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Vocational	6	4.2	2	1.1
Technical Course	4	2.8	6	3.2
Business or Commercial	9	6.3	1	0.5
Matriculation Program	3	2.1	12	6.3
General Course Diploma	6	4.2	6	3.2
Academic-Unspecified	21	14.7	32	16.8
Too Young	77	53.8	122	64.2
Non-response	17	11.9	9	4.7
TOTAL	143	100.0%	190	100.0%

P > .05

The data in Table 5:6 suggest that the course of study for the two samples is approximately equal (P = non-significant differences). There are slightly more native youth students taking the vocational and business or commercial courses of study, but this may be partly due to a relatively younger age of the non-native sample. The most important outcome is that slightly more non-native youth than native youth are in the matriculation program. This finding is in accordance with the expectation that fewer native youth expect

to go on to university education, and therefore not as many take the required courses needed for university entrance. These interpretations are limited by the fact of a large percentage of respondents who are yet too young to be in a program or specialized course of study (53.8% native and 64.2% non-native).

Residence

As already specified, eighty (35.7%) of the native youth sample are transients. Of the native youth students, one was institutionalized here in the city and the rest were residents. Of the non-native youth students, 189 (99.5%) were residents of the city, and one (0.5%) was a non-resident.

These figures suggest that the two student samples were both composed of almost totally permanent residents of Edmonton.

Residence Mobility

The following table (Table 5:7) presents the residence mobility of the native and non-native youth student samples.

TABLE 5:7

Residence Mobility of the Student Samples

<u>Length of Residence</u>	<u>Mobility</u>	Native Youth		Non-Native Youth	
		<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
1 year or less	High	35	24.5	6	3.2
1 to 3 years	Moderately				
	High	26	18.2	14	7.4
3 to 5 years	Medium	32	22.4	18	9.5
6 to 10 years	Medium - Low	17	11.9	21	11.1
10 plus years	Low	29	20.3	129	67.9
Non-response		4	2.8	2	1.1
TOTAL		143	100.0%	190	100.0%

The data in Table 5:7 suggest that the native youth sample is much more mobile than the non-native sample ($P < .05$). Twenty-four point five per cent of native youth students versus 3.2% of the non-native youth are highly mobile and have lived in Edmonton for one year or less. The moderately high and medium mobility categories also describe a much higher percentage of native youth than non-native youth. It can also be seen that 67.9% of non-native youth versus 20.3% of native youth are not at all mobile, and have probably lived in Edmonton all their lives.

Previous Residence

The previous residence characteristics of the student and transient (non-student) native samples are presented in Table 5:8, along with the previous residence characteristics of the non-native youth sample.

TABLE 5:8

Previous Residence of Samples

<u>Previous Residence</u>	Native Youth				Non-Native Youth	
	Transient		Student		<u>N</u>	<u>%</u>
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>		
British Columbia	9	11.1	2	1.4	7	9.8
Alberta	50	61.7	9	69.2	29	40.8
Sask. or Manitoba	17	21.0	11	7.7	10	14.1
Ontario	1	1.2	1	0.7	6	8.4
Quebec	-	-	-	-	2	2.8
Maritime Provinces	-	-	-	-	1	1.4
Yukon or N.W.T.	4	4.9	9	6.3	1	1.4
Outside Canada	-	-	-	-	15	21.1
TOTAL	<u>81</u>	<u>100.0%</u>	<u>122</u>	<u>100.0%</u>	<u>71</u>	<u>100.0%</u>
NON-RESPONSE and NOT APPLICABLE	0	N.A.	21	N.A.	119	N.A.

It can be seen that more of the native youth than the non-native youth came from other Alberta centres, which defines within province mobility ($P < .05$). It is also interesting to note that the largest percentage of mobile native students from outside Alberta are from Saskatchewan, Manitoba, Yukon or Northwest Territories; and the largest percentage of mobile native transients from outside Alberta are from Saskatchewan, Manitoba, or British Columbia. In comparison a large percentage (21.1%) of non-natives have moved to Edmonton from outside Canada, while a lower percentage (14.1%) have also come from Saskatchewan or Manitoba.

This suggests that the mobile native youth are most likely to have come from other Alberta centres, and Saskatchewan or Manitoba; while the mobile non-native youth are most likely to have come from within the province or from outside Canada.

Living Arrangements

The following table presents the details of the native youth and non-native youth family life.

TABLE 5:9

<u>Living Arrangements</u>						
<u>Living With</u>	Native Youth				Non-Native Youth	
	Transient		Students			
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
1) With Family	28	34.5	88	61.5	189	99.5
Family	18	22.2	79	55.2	185	97.4
Relatives	10	12.3	9	6.3	4	2.1
2) With Other	51	63.0	51	35.7	1	0.5
Friends	16	19.8	5	3.5	-	-
Alone	15	18.5	-	-	-	-
Instit. or						
home	6	7.4	38	26.6	-	-
Hostel	9	11.1	-	-	-	-
Other	5	6.2	8	5.6	1	0.5
3) Non-response	<u>2</u>	<u>2.5</u>	<u>4</u>	<u>2.8</u>	<u>0</u>	<u>0.0</u>
TOTAL	81	100.0%	143	100.0%	190	100.0%

The data in Table 5:9 suggest that fewer of the native students than of the non-native students live with their families (55.2% versus 97.4%, $P < .05$). Many of the native youth students (26.6%) live in institutions or homes and with relatives or friends (9.8%). However, in comparison, almost all (99.5%) of the non-natives live with their families. This difference may be due to the fact that many of the native youth students are from outside the city, and are in Edmonton to go to school. This analysis defines the living arrangements and family structures of native youth as distinct from the non-native youth ($P < .05$).

It can also be seen from Table 5:9 that the transients are usually living with friends, in an institution or home, in a hostel, or alone (63.0%). Only one-third are living with transient parents or with relatives (34.5%).

The following table, Table 5:10 presents a more complete picture of the living details of the native youth sample.

TABLE 5:10

Living Details

<u>Details</u>	Total Native Sample		Transients		Students	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Boarding Out	3	1.3	-	-	3	2.1
Medical Institution	10	4.5	-	-	10	7.0
Foster Home	15	6.7	1	1.2	14	9.8
Centre	1	0.4	1	1.2	-	-
Residential Institution	8	3.6	-	-	8	5.6
YMCA, McDougall House	5	2.2	5	6.2	-	-
Common Law, etc.	1	0.4	1	1.2	-	-
Other	1	0.4	1	1.2	-	-
Total living in homes other than own	44	19.5	9	11.0	35	24.5
Non-response	180	80.5	72	89.0	108	75.5
TOTAL	224	100.0%	81	100.0%	143	100.0%

The data in Table 5:10 suggest that 24.5% of the native students are living in homes other than their own, or with relatives or friends. These youth are being institutionalied or cared for by other government means (for example: foster homes). The non-response rate is too high in the native youth transient category for any meaningful interpretation to be drawn. However, it is interesting to note that five (6.2%) of the transients were staying at the Y.M.C.A. or McDougall House.

Family Members

The question of family members is restricted to those respondents who said they were living with their family, and also indicates the intactness of the home for the total sample.

TABLE 5:11

Intactness of Home and Family Members

<u>Family Members</u>	<u>Total Sample</u>		<u>Native Sample</u>		<u>Students</u>		<u>Non-Native Sample</u>	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Mother	18	8.0	2	2.5	16	11.2	13	6.8
Step Mother or Father	1	0.4	-	-	1	0.7	-	-
Father	5	2.2	2	2.5	3	2.1	4	2.1
Sister or Brother	7	3.1	3	3.7	4	2.8	1	0.5
Both Mother and Father (intactness)	54	24.1	7	8.6	47	32.9	143	75.3
Not living with family (icluding transients)	116	51.7	61	75.4	60	42.0	-	-
Non-responses	23	10.5	6	7.3	12	8.3	27	15.3
TOTAL	224	100.0%	81	100.0%	143	100.0%	190	100.0%

The data in Table 5:11 suggest that the majority of the native youth sample (51.7%) are not living with their parents, and approximately only one quarter (24.1%) are living in an intact home. Within the total sample, three-quarters (75.4%) of the transients are not living with their family, and less than 10% (8.6%) are from an intact home (containing both mother and father). Also within the total sample, approximately one-third (32.9%) of the native students are living in an intact home. Compared to this, three-fourths of the non-native students are from intact homes, and all of them are living with some part of their extended family.

This suggests that these two samples (native and non-native) are differently characterized according to intactness of home, with the majority of the native youth not coming from intact homes and a strong majority of the non-native youth coming from intact homes ($P < .05$).

The item describing the presence of non-family members in the respondents' homes is also related to family intactness. This is presented below in Table 5:12.

TABLE 5:12

Presence of Non-Family Members

	Native Youth Sample		Native Students		Non-Native Sample	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Yes	47	21.0	32	22.4	23	12.1
No	132	58.9	91	63.6	160	84.2
Non-response	45	20.1	20	14.0	7	3.7
TOTAL	224	100.0%	143	100.0%	190	100.0%

The data in Table 5:12 suggest that a noticeably larger percentage of native youth students (and the total native sample) than non-native youth have non-family members in their homes ($P < .05$). This was also evident in Tables 5:9 and 5:11, where a greater proportion of native students lived in other living arrangements than the family and a smaller proportion came from intact homes. The data in 5:12 would confirm the fact of less intact and nuclear families in the native youth sample (both total and student).

Family Size

Table 5:13 presents the number of children in the respondents' families. This item indicates the size of family that the respondents come from.

TABLE 5:13

Family Size - Number of Children

<u>No. of Children</u>	<u>Native Youth Sample</u>		<u>Native Students</u>		<u>Non-Native Sample</u>	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
0 to 1	20	8.9	12	8.4	6	3.2
2 to 3	16	7.1	14	9.8	71	37.4
4 to 6	72	32.1	55	38.5	87	45.8
7 to 9	59	26.3	32	22.4	21	11.1
10 plus	36	16.1	22	15.4	5	2.6
Non-response	<u>21</u>	<u>9.5</u>	<u>8</u>	<u>5.5</u>	<u>0</u>	<u>0.0</u>
TOTAL	224	100.0%	143	100.0%	190	100.0%
Mean # of children	6.5		6.2		4.3	

$P < .05$

The data in Table 5:13 clearly suggest that the non-native and native youth samples are differentially characterized according to family

size ($P < .05$). The majority of the native youth (58.4%) come from larger families (4 to 9 children). This is also true for the native youth students, where 60.9% come from larger families and the mean family size is 6.2. In comparison, the vast majority (83.2%) of non-native youth come from comparably smaller families (2 to 6 children), with a mean family size of 4.3. It is interesting to note that 16.1% of the native youth come from very large families (10 children and more).

Related to the item of the number of children in the respondents' family, is the question of the number of children still at home. This data is presented below in Table 5:14.

TABLE 5:14

Number of Children at Home

<u>No. of Children</u>	<u>Native Youth Sample</u>		<u>Native Students</u>		<u>Non-Native Sample</u>	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
0 to 3	83	37.1	53	37.1	101	53.2
4 to 6	80	35.7	58	40.6	75	39.5
7 to 9	21	9.4	13	9.1	14	7.4
10 plus	4	1.8	4	2.8	-	-
Non-response	36	16.0	15	10.4	0	0.0
TOTAL	224	100.0%	143	100.0%	190	100.0%

$P > .05$

The data in Table 5:14 adds to the interpretation of size of family presented in Table 5:13. The majority (72.8%) of the native youth sample have 0 to 6 children in their homes. However, the majority (53.2%) of non-native youth have from none to three children living in their homes. Therefore, it seems that the number of children at home is larger for native youth than for non-native youth, even though the differences are not significant.

Number of Youth in Home

This item describes the number of youth (ages 12 to 25) that are in the respondents' home. This would define the number of siblings of influencing age, as presented in Table 5:15 below.

TABLE 5:15

Number of Youth in Home

<u>No. of Youth</u>	<u>Native Youth Sample</u>		<u>Native Students</u>		<u>Non-Native Sample</u>	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
None	15	6.7	11	7.7	6	3.2
One	27	12.1	20	14.0	44	23.2
Two	21	9.4	20	14.0	54	28.4
Three	37	16.5	24	16.8	37	19.5
Four	31	13.8	20	14.0	25	13.2
Five	13	5.8	6	4.2	7	3.7
6 to 10	15	6.7	12	8.4	5	2.6
Non-response	65	24.0	30	20.9	12	6.2
TOTAL	224	100.0%	143	100.0%	190	100.0%
Mean # of Youth	3.1		2.9		2.5	

$P > .05$

The frequency distribution from Table 5:15 suggests that the number of youth in the home is not a differentiating characteristic between native and non-native samples ($P =$ non-significant). However, when the mean number of youth in the homes of each sample is looked at, it can be seen that the mean number of youth at home is noticeably smaller for the non-native sample than the native sample. This item is again related to family size.

The following demographic characteristics apply only to the native youth population. Frequencies for both the student and transient samples will be presented along with the frequencies for the total native youth sample.

TABLE 5:16

Type of Native

<u>Type of Native</u>	Total Native Youth		Transients		Students	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Eskimo	6	2.7	1	1.2	5	3.5
Registered but not Treaty	2	0.9	2	2.5	—	—
Treaty Native	76	33.9	29	35.8	47	32.9
Metis	129	57.6	44	54.3	85	59.4
Non-response	11	4.9	6	7.4	6	4.2
TOTAL	224	100.0%	81	100.0%	143	100.0%

$P > .05$

The data in Table 5:16 suggest that the majority (57.6%) of the native youth sample are Metis, and another one-third are treaty Indians. This finding is upheld when the transient and student sub-samples are looked at. This analysis also suggests that the native transient and student samples are not different in terms of type of native ($P = \text{non-significant}$).

Native Ancestry

Table 5:17 below describes the ancestry of the native youth sample.

TABLE 5:17

Native Youth Ancestry

<u>Ancestry</u>	Total Native Youth		Transients		Students	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Cree	102	45.5	33	40.7	69	48.3
French Cree	34	15.2	13	16.0	21	14.7
English Cree	8	3.6	6	7.4	2	1.4
French and some Native	7	3.1	4	4.9	3	2.1
Other	34	15.2	15	18.5	19	13.3
Unspecified Native or Metis	8	3.6	3	3.7	5	3.5
Non-response	31	13.8	7	8.8	24	16.7
Cree and Mixed Cree	144	64.3	52	64.1	92	64.4
TOTAL	224	100.0%	81	100.0%	143	100.0%

P > .05

This suggests that the majority of the total native youth sample are of Cree and mixed Cree ancestry (144 or 64.3%). This finding is further supported when the native transient and student sub-samples are analyzed separately (64.1% and 64.4%, respectively, P = no significant differences).

Linguistic Group

Table 5:18 below describes the linguistic affiliation of the total, transient and student native samples.

TABLE 5:18

Linguistic Group of Native Sample

<u>Linguistic Group</u>	Total Native Sample		Transients		Students	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Algonkian	151	67.4	57	70.4	94	65.7
Athapaskan	14	6.3	3	3.7	11	7.7
Iroquoian	3	1.3	-	-	3	2.1
Salishan	1	0.4	1	1.2	-	-
Siquan	2	0.9	1	1.2	1	0.7
Non-response and don't know	53	23.7	19	23.5	1	23.8
TOTAL	224	100.0%	81	100.0%	143	100.0%

$P > .05$

The data in Table 5:18 suggest that the vast majority (67.4%) of the native youth population are of the Algonkian linguistic group. Only one other linguistic group is noticeably represented, the Athapaskan group (6.3%). Again, the transient and student sub-sample are not differentially characterized re linguistic group ($P = \text{non-significant}$).

Summary

The characteristics of the native youth sample may be briefly defined as: older than the average non-native in the same grade; more likely to be in vocational, technical, business or commercial courses than matriculation in senior high school; more mobile than a comparative non-native sample; more likely to come from other Alberta Centres, and Saskatchewan and Manitoba; less likely than a comparable non-native sample to be living with their families; more likely to be cared for by government means or agencies; less likely to come from intact homes; more likely to come from larger homes (in terms of number of children, and number of children at home); mainly Metis and some treaty Indian; mainly of Cree or mixed Cree ancestry; mainly of the Algonkian linguistic group; and if the native youth are young and students, they are less likely to speak their native tongue.

Therefore, the data analysis in this chapter has isolated the following characteristics that are peculiar to the native youth.

- i) Metis, native ancestry; Cree and Algonkian linguistic group
- ii) behind in school grade, older than classmates
- iii) more likely in vocational, technical, business or commercial courses
- iv) highly mobile, from other Alberta centres, and/or Saskatchewan or Manitoba
- v) less likely to be living with family, and more likely to be cared for by government means and agencies
- vi) non-intact homes
- vii) larger families

Use of Native Tongue

Of the 224 in the native youth sample, 92 (41.1%) speak their native tongue. Within this sample, 46 (56.8%) of the 81 transients speak their native tongue. Also, within the total sample, 46 (32.2%) of the 143 students speak their native tongue. It is probable that this finding is mainly due to the general older age of the transient sample. The majority (51.8%) of the transients were in the 20 to 25+ age bracket (see Table 5:3) and mean age 21.2. However, the majority (63.0%) of the native students were in the 15 and younger age group, mean age 14.6. This may have implications for alienation, or a desire to assimilate for the native students, and will be discussed in detail in following sections of the report. It is suggested here that the younger age group may be struggling with the assimilation problem and identity crisis in their school milieu, and this may be a stage that most native youth pass through. The transient sample of mean age 21.2 may have passed through this assimilation crisis period and may have become more identified with their traditional culture. It is also possible that the transient youth are more likely to come from reserves and other areas where the native youth have more opportunity to speak their native tongue.

CHAPTER VI

THE AGENCY INFORMATION

This chapter contains a descriptive item and content analysis of various aspects of the respondents' contact with service agencies. The agencies considered in this study have been divided into seven types:

- 1) government agency
- 2) private, volunteer, non-profit, native agency
- 3) private, volunteer, non-profit, non-native agency
- 4) private, non-volunteer, non-profit, non-native agency
- 5) private, profit, non-native or native agency
- 6) private, non-volunteer, non-profit, native agency
- 7) unspecified

It has been attempted where possible, to discuss specific agencies and types rather than agencies in general. Specific respondents are not isolated, and one respondent could have had multiple answers to any item (e.g. contact with more than one employment agency). The responses to items are discussed rather than respondents.

The type of needs these agencies are assumed to be meeting define the focus of interest in this area, for example: employment agencies, social service agencies, social clubs, religious agencies, and auxiliary educational agencies. Throughout this chapter the problem of high non-response and/or low contact (and low applicability) is particularly evident. Therefore the reader is cautioned to refer to the total number of respondents and then to the importance of the analysis of each item.

This chapter will focus on the following topics for native and non-native samples:

- 1) contact and satisfaction with employment agencies
- 2) agency contact by family and
 - a) quality of service
 - b) quantity of service
 - c) attitude of agency toward family

- 3) agency contact by friends and why unfavorable experiences
- 4) agency contact by respondents, in terms of
 - a) most helpful agency and why
 - b) least helpful agency and why
 - c) attitude of agency
 - d) extent of discrimination
- 5) hesitancy to contact agency again
- 6) perception of adequacy of agencies both for those who have and have not contacted an agency in terms of:
 - a) number
 - b) cater to needs
 - c) variety in type of services
 - d) general inadequacy
- 7) why respondent has not contacted an agency (if applicable)

The following item of analysis is applicable only to the native sample:

- 1) contact of respondent with Indian Affairs, Social Development and the Native Association Agencies for money, counselling and/or help.

Contact and Satisfaction with Employment Agencies

Of the 224 total native youth sample, sixty six (29.5%) have contacted employment agencies in search of a job. Of this group, fifty-two were transients and fourteen were students. Therefore, of the native transient sub-sample, 64.2% have contacted employment agencies; and of the native student sub-sample, 9.8% have contacted employment agencies.

In comparison with the native student sub-sample, 4.7% (nine out of 190) of the non-native sample have contacted an employment agency. This comparison is also related to the percentage of each student sample who are too young to be employed. Since the native student sample have a smaller proportion in the younger age groups than the non-native student sample, this may reflect on the lower percentage of non-native students who have contacted employment agencies for jobs. Related to this, it is interesting to note that 40.0%

(76 out of 190) of the non-native students stated that they were unemployed because they were too young, while 3.8% (44 out of 143) of the native students gave the same reason for their unemployment. This adds weight to the suggestion that the lower percentage of non-natives who have contacted employment agencies is partly a result of their age.

The following table (Table 6:1) presents the extent of contact that each of the samples and sub-samples had with employment agencies. The extent of contact is further qualified below, as the respondents having found jobs through contact with specific employment agencies.

TABLE 6:1

Extent of Contact with Employment Agencies for Jobs

<u>Employment Agency</u>	Native Youth Sample						Non-Native Youth Sample	
	Total <u>N</u>	<u>%</u>	Transient <u>N</u>	<u>%</u>	Student <u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Canada								
Manpower	57	80.3	48	85.7	9	60.0	7	88.5
Indian								
Affairs	4	5.6	2	3.6	2	13.3	-	-
Provincial								
Public	1	1.4	1	1.8	-	-	-	-
Municipal								
Public	1	1.4	-	-	1	6.7	-	-
Other								
Federal	-	-	-	-	-	-	-	-
Provincial								
Private	-	-	-	-	-	-	1	12.5
Other	8	11.3	5	8.9	3	20.0	-	-
TOTAL	71	100.0%	56	100.0%	15	100.0%	8	100.0%
CONTACTS								

Of the seventy-one native youth responses indicating contact with an employment agency, the vast majority (80.3%) have been contacts with Canada Manpower. Also, 85.7% of the fifty-six transient responses and 60.0% of the fifteen student responses indicating contact with an employment agency, are contacts with Canada Manpower. However, 13.3% (2 out of 15) native student responses indicate contact with Indian affairs. In comparison, out of the nine non-responses indicating contact with an employment agency, almost all of these responses (88.5%) are contacts with Canada Manpower.

This would suggest that of the youth who have contacted an employment agency for a job, a strong majority have contacted Canada Manpower, a small number of native youth have contacted the Indian Affairs Department, and a minimal number have contacted other agencies.

The results of the native youth contact with employment agencies is presented below in Table 6:2.

TABLE 6:2

RESULTS OF NATIVE YOUTH CONTACT WITH EMPLOYMENT AGENCIES

Agency By Type	Frequency of 1 N	Got Job		Mildly Dissatisfied		Didn't Get Job - Very Dissatisfied		Agency Indifferent		Vague	
		N	%	N	%	N	%	N	%	N	%
I Government Agency	65	14	21.5	1	.02	38	58.5	1	.02	3	4.6
1) Canada Manpower	57	12	21.0	1	1.8	36	63.2	1	1.8	3	5.3
2) Dep't. of Indian Affairs & Northern Dev.	4	1	25.0	-	-	2	50.0	-	-	-	-
3) Dep't. of Social Dev.	1	1	100.0	-	-	-	-	-	-	-	-
4) Gov't. of N.W.T.	3	3	3.9	-	-	-	-	-	-	-	-
II Private, Volunteer, Non- Profit, Native Agency	2	2	100.0	-	-	-	-	-	-	-	-
1) Native Brotherhood	1	1	100.0	-	-	-	-	-	-	-	-
2) Canadian Native Friendship Centre	1	1	100.0	-	-	-	-	-	-	-	-
V Private, Profit, Non- Native or Native Agency	5	2	40.0	-	-	1	20.0	1	20.0	-	-
1) Industrial Overload	4	1	25.0	-	-	1	25.0	1	25.0	-	-
2) Temporary help served Manpower	1	1	100.0	-	-	-	-	-	-	-	-
VI Private, Non-Volunteer, Non-Profit, Native Agency	2	1	25.0	1	25.0	-	-	-	-	-	-
1) Indian & Metis Assoc. of Alberta	1	-	-	1	100.0	-	-	-	-	-	-
2) Reserve Placement	1	1	100.0	-	-	-	-	-	-	-	-
VII Agency Unspecified	2	2	100.0	-	-	-	-	-	-	-	-

¹ Total N = 76 responses

The data in Table 6:2 suggest that the majority (58.5%) of contact with government agencies resulted in dissatisfaction and no jobs for the native youth. Another 21.5% of the contact resulted in obtaining a job and respondent satisfaction. This is explained in part, by the observation that the majority (63.2%) of contact with Canada Manpower resulted in no job and respondent dissatisfaction. The contact with the Indian Affairs and Northern Development Department resulted in two respondents being very dissatisfied and without a job, and one respondent who got a job and was satisfied.

The contact with private, volunteer, non-profit, native agencies was favorable, in that the two respondents who had contacted the Native Brotherhood and Canadian Native Friendship Centre were both satisfied and got jobs.

The contact with private, profit, non-native or native agencies was inconclusive. The one respondent who contacted temporary help service (Manpower) got a job and was satisfied. However, the contact with Industrial Overload was not as favorable. One respondent got a job and was satisfied; but one also was very dissatisfied and didn't get a job, while still another found this agency indifferent to his needs.

The native youth contact with the Indian and Metis Association of Alberta, and Reserve Placement was relatively favorable.

The data suggests that even though the majority of the native youth approach government employment agencies, a majority of these people do not obtain jobs and are dissatisfied with their treatment.

The following table (Table 6:3) presents the results of the non-native youth contact with employment agencies. The inference of these results are very limited by the low amount of non-native youth contact with agencies.

TABLE 6:3

Results of Non-Native Youth Contact with Employment Agencies

<u>Agency by Type</u>	<u>Total Contact</u>		<u>Got Job Satisfied</u>		<u>Didn't Get Job</u>		<u>Agency Indifferent</u>		<u>Vague</u>	
	<u>N¹</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
I Government Agency	8	80.0	3	33.3	1	12.5	1	12.5	3	33.3
1) Canada Manpower	7	70.0	3	42.9	1	14.3	1	14.3	2	28.6
2) Dept. of Social Development	1	10.0	-	-	-	-	-	-	1	100.0
IV Private, Non-Volunteer, non-profit, non-native agency	2	20.0	-	-	-	-	-	-	2	100.0
1) Central Volunteer Bureau	1	10.0	-	-	-	-	-	-	1	100.0
2) Youth Employment Agency	1	10.0	-	-	-	-	-	-	1	100.0

¹ Total N = 10 responses

The data presented in Table 6:3 suggest that the only unfavorable experience the non-native youth respondents had with an employment agency, was with Canada Manpower. One respondent did not get a job and remained dissatisfied while another respondent viewed the Canada Manpower office as indifferent to his needs. However, three out of the seven respondents who contacted Manpower got a job and were satisfied.

This analysis suggests that the contact with employment agencies is the same for the non-native youth and native youth, in terms of which agency they contacted. The results of the non-native youths' contact with employment agencies seem to be only marginally better, with a slightly larger percentage of the non-native youth who contacted an employment agency getting a job and being satisfied. Again, the number of the non-native youth who have contacted an employment agency is relatively small ($n=9$) and the number of responses is also small ($n=10$). Therefore, this limits the amount of importance we can place on these results.

Agency Contact by Family

This section deals with the extent and result of the respondent's knowledge of his family's contact with agencies. Over two-thirds (68.3%) of the total native youth sample stated that their families had contacted an agency or agencies, as compared to 6.8% of the non-native sample. Therefore, it can be stated that the extent of agency contact is much higher for the families of native youth than the non-native youth. The low percentage of non-native family contact with agencies may be related to socio-economic status but this cannot be tested because the socio-economic status of the respondent or his family was not measured in this study.

The type of agencies contacted also differs greatly for the native versus the non-native samples, (as can be seen in Tables 6:4 and 6:5). Tables 6:4 and 6:5 also present the perceived quality, quantity and attitudes of the agency toward the respondent's family, for both natives and non-natives.

The data in Table 6:4 suggests that of the 192 reported native family contacts with agencies, 80.0% ($n=153$) contacts were with government agencies. Within the category of government agencies, 43.2% of the total contacts were made with the Department of Social Development (including provincial and city welfare).

Another large number of contacts were made with the Department of Indian Affairs and Northern Development (24.5% of the total contacts). Also, 8.9% of the total contacts were made with the Canada Manpower office. Of the government agencies contacted by the native youths' families, the majority were satisfied with the quality of the service provided (60.1%) were satisfied with the quantity of service (51.6%), while only a quarter (24.2%) viewed the government agencies contacted as cooperative in attitude.

Specifically, the major dissatisfaction can be seen in terms of the Canada Manpower service; i.e., 64.7% of 17 contacts reported dissatisfaction with the quality of the service, 35.3% were dissatisfied with the quantity of service, and 23.5% viewed the attitude of Canada Manpower as uncooperative. The contact with A.R.D.A. was too small to allow analysis. The majority of the contact with the Department of Indian Affairs and Northern Development resulted in being satisfied with the quality of services (68.1%), with the quantity of service (59.6%), and viewed the attitude of the agency as at least "somewhat cooperative" (80.9%). The contact with the Department of Social Development was also viewed as satisfactory in terms of quality and quantity of service and perceived cooperation.

Comparatively speaking, the native youth family contact with the other types of agencies was minimal. Of the six that contacted the Native Brotherhood Society, the majority were satisfied with the quality and quantity of service and the cooperative attitude. Of the five private, volunteer, non-profit, non-native agencies contacted, the one contact with the Salvation Army was the only unfavorable one. This respondent was dissatisfied with the quantity of service and felt that the Salvation Army's attitude was very uncooperative.

The reaction to the contact with the private, non-volunteer, non-profit, non-native agencies was mixed, with the majority being satisfied with the services. The clearest reaction was to the Single Men's Hostel. Of the six that had contact with this agency, one (16.7%) were dissatisfied with the quality of service, three (half) were dissatisfied with the quantity of service, and 1 viewed the attitude of the agency as uncooperative. Of the two respondents that contacted Manpower Temporary Help Service, one was satisfied and the other was dissatisfied. The one contact with Industrial Overload was unfavorable. However, the one contact with a Chartered Bank was favorable.

The reaction to the private, non-volunteer, non-profit, native agencies was also diverse. The results of the analysis of Band Welfare contact is inconclusive because of an almost equal number of dissatisfied and satisfied reactions.

These results suggest that the majority of native family contacts are made with government agencies, particularly the Department of Social Development, the Department of Indian Affairs and Northern Development, and Canada Manpower. The major reported dissatisfaction was with the quality, quantity and uncooperativeness of Canada Manpower. The major reported satisfaction in terms of government agencies was with the Department of Social Development and the Department of Indian Affairs and Northern Development and Canada Manpower. The major reported satisfaction with non-governmental agencies was with the Native Brotherhood Society.

TABLE 6:5

AGENCIES CONTACTED BY NON-NATIVE YOUTH RESPONDENTS' FAMILIES AND THE RESULTS

Agency by Type	Total			Quality of Service				Quantity of Service				Attitude of Agency				Uncooperative N
	Frequency 1 N	%	N ²	Satisfied		Dissatisfied		Satisfied N	%	N	%	Cooperative		Somewhat Cooperative		
				N	%	N	%					N	%	N	%	
1) Canada Manpower	12	92.3	5	41.7	4	33.3	5	41.7	4	33.3	2	16.7	4	33.3	2	16.7
2) Dept. of Social Development	8	61.5	3	37.5	2	25.0	3	37.5	2	25.0	1	12.5	2	25.0	1	12.5
3) Non-Government Institutions	3	23.1	1	33.3	2	66.7	1	33.3	2	66.7	1	33.3	1	33.3	1	33.3
4) Agency unspecified	1	7.6	1	100.0	-	-	1	100.0	-	-	-	-	1	100.0	-	-

Total N¹ = 13Total N² = 12

As reported above, the total number of non-native family contacts with agencies is small (n=13). According to Table 6:5, of the thirteen contacts, twelve (92.3%) were with government agencies. The reactions as to quality and quantity of service and perceived attitude of agency were almost equal in terms of favorable versus unfavorable. The majority (n=8) of the contacts were made with Canada Manpower. Of the three contacts with the Department of Social Development, two were dissatisfied with the quality and quantity of service.

In comparing the results for the two samples in terms of respondents' family contact with agencies, it can be seen that in both samples the majority of the contacts were made with government agencies. Respondents in both samples expressed unfavorable reactions to the attitude of, and services provided by Canada Manpower Services.

AGENCY CONTACT BY FRIENDS

This section deals with the respondents' knowledge of unfavorable experiences that his friends have had with agencies. This analysis will provide us with additional information from the respondents who themselves have had no contact with agencies but have friends who have had agency contact. Table 6:6 presents the native respondents' knowledge of his friends' unfavorable experiences with agencies. Thirty-eight point 8 per cent (87 out of 224) of the native sample knew of friends with unfavorable experiences. Of these eighty-seven, 57.5% knew which agency, and 44.8% knew the reason for the unfavorable experience.

Only one non-native respondent indicated a friend with unfavorable agency experience and this unfavorable experience was with Manpower. The reason for the unfavorable experience was not known.

TABLE 6:6

Agency Contact by Friends and Results

Reasons for Unfavorable Experience

Agency Type	Total Frequency		Uncooperative & No Help		Bad Results		Prejudice		Lack of Communication		
	N ¹	%	N ²	%	N	%	N	%	N	%	
I. Government Agency	58	89.2	11	19.0	2	3.4	3	5.2	2	3.4	
1) Canada Manpower	23	35.4	4	17.4	1	4.3	3	13.0	-	----	
2) Dept. of Indian Affairs & Northern Development	16	24.6	1	.06	1	.06	-	-----	1	.06	
3) Dept. of Social Development	18	27.8	6	33.3	-	----	-	-----	-	----	
4) Education Dept. of Yellowknife	1	1.5	-	-----	-	----	-	-----	-	----	
IV. Private, non-volunteer, non-profit, non-native agency	3	4.6	1	33.3	-	----	-	-----	-	----	
1) McDougall House	1	1.5	NON - RESPONSE								
2) Single Men's Hostel	1	1.5	1	100.0	-	----	-	-----	-	----	
3) Y.W.C.A.	1	1.5	NON - RESPONSE								
VI. Private, non-volunteer, non-profit, native agency	1	1.5	4	NON - RESPONSE							
1) Metis Association of Alberta	1	1.5	5	NON - RESPONSE							
VII. Unspecified	3	4.6	1	33.3	3	100.0	1	33.3	1	33.3	

1. Total N = 65 responses; 2. Total N = 58 responses; 3. Total N = 3 responses
4. Total N = 1 response; 5. Total N = 3 responses

The data in Table 6:6 suggests that again the majority of the native youth friends' contacts were made with government agencies, particularly Canada Manpower, Department of Social Development and Department of Indian Affairs and Northern Development. These contacts were specified as unfavorable experiences. The most common unfavorable experience was listed with Canada Manpower (35.4% of unfavorable contacts). The reasons given for the unfavorable experiences were:

i) Uncooperative and no help (19.0% of unfavorable contacts)

ii) Prejudice (3 out of 23, or 13.0% of unfavorable contacts)

24.6% (N=16) of the unfavorable experiences were with the Department of Indian Affairs and Northern Development, but the reasons for the unfavorable experiences were not listed. Also 27.8% (N=18) of the unfavorable experiences were with the Department of Social Development. The major reason given for these unfavorable experiences was that the agency had been uncooperative and offered no help.

This analysis suggests additional information about agency contact, in that the majority of contacts were with government agencies, only one of which is an agency for native people. The most unfavorable experience was in contact with Canada Manpower, while also a sizeable amount (24.6 - 27.8%) of the respondents' friends experienced unfavorable experiences with the Departments of Indian Affairs and Northern Development, and Social Development.

AGENCY CONTACT BY RESPONDENT

Here the contact of the respondents themselves with agencies is analyzed. This contact is analyzed in terms of :

- i) most helpful agency and why
- ii) least helpful agency and why
- iii) attitude toward the respondent of the agencies contacted
- iv) extent of perceived discrimination of agencies contacted

Eighty-nine out of two hundred and twenty-four of the total native youth sample have contacted an agency for themselves. Of these 89, 25.2% (36 out of 143) of the native students have contacted an agency for themselves, while 64.4% (53 out of 81) of the native transients have contacted an agency for themselves. In comparison, 4.2% (8 out of 190) of the non-native sample have contacted an agency. This suggests that a much larger proportion of native transient youth have contacted an agency, versus the student native youth. This may be due to the much older age of the transient sub-sample, and the fact that the younger natives' families contact agencies for them and the family as a whole. Also, a much smaller proportion of non-natives have contacted agencies, as compared to the natives. This is probably due to socio-economic factors (which can't be measured here) and the proportionately larger number of non-native youth in the younger age brackets.

i) Most Helpful Agency

Table 6:7 below presents the agencies that the native youth contacted and found most helpful. Some of the reasons why these agencies were found most helpful are also listed.

TABLE 6:7

Most Helpful Agency Contacted by Native Youth and Why Helpful

By Type	Reasons Why Most Helpful									
	Total Frequency		General Favorable Attitude		Dependable & Prompt		Got Help		Understanding	
	N ¹	%	N ²	%	N	%	N	%	N	%
Government Agency	51	73.9	2	3.9	2	3.9	26	51.0	2	3.9
R.D.A.	1	1.4			1	100.0				
Canada Manpower	4	5.8	1	25.0			2	50.0		
pt. of Indian Affairs & Northern Development	21	30.4					8	38.1	1	4.8
pt. of Social Development	20	29.0	1	.05			3	65.0	1	.05
Education of Servicemen's Men	1	1.4					1	100.0		
Gov't of Northwest Territories	2	2.9			1	50.0	1	50.0		
Human Resources Dev. Authority	1	1.4					1	100.0		
Institutional Services	1	1.4	NON RESPONSE							
Private, volunteer, non-profit, agency	1	1.4	N ³		1	100.0				
Private Brotherhood Society	1	1.4	1	100.0						
Private, volunteer, non-profit, agency	3	4.3	N ⁴		1	33.3	1	33.3		
Future Society	1	1.4	NON RESPONSE							
Evangelical Army	1	1.4	1	100.0						
Guard of Iz	1	1.4					1	100.0		
Private, non-volunteer, non-native agency	8	11.6	N ⁵		1	12.5	2	25.0	1	12.5
Single Men's Hostel	4	5.8	1	25.0			1	25.0		
W.C.A.	4	5.8					1	25.0	1	25.0
Private, profit, non-native or agency	2	2.9	N ⁶				2	100.0		
Industrial overload	1	1.4					1	100.0		
Manpower Temporary Help	1	1.4					1	100.0		
Private, Non-volunteer, non-native agency	3	4.3	N ⁷				2	100.0		
Food Welfare	1	1.4	NON RESPONSE							
Health Rehabilitation Branch	1	1.4					1	100.0		
Service Placement & Assistance	1	1.4					1	100.0		
Unspecified	1	1.4	N ⁸		NON RESPONSE					

1. Total N = 69 responses ; 2. Total N = 51 responses; 3. Total N = 1 response; 4. Total N = 3 responses;
 5. Total N = 8 responses; 6. Total N = 2 responses; 7. Total N = 3 responses; 8. Total N = 1 response.

The data from Table 6:7 suggest that the most helpful agency type mentioned was government agencies. 73.9% of the total (N=69) responses about "most helpful agencies" were in reference to government agencies. The most common reason why the government agencies were viewed as most helpful was that the respondents got help. Within the category of government agencies (in fact all types of agencies), the most frequently stated "most helpful agency" was the Department of Indian Affairs and Northern Development (30.4% of responses). Close in frequency of favorable comments to this agency was the Department of Social Development (29.0% of responses). The most frequent reason why these two agencies were viewed as the most helpful was that the respondent got help.

Canada Manpower, the Single Men's Hostel and the Y.W.C.A. all had four responses each (5.8% of the responses) that stated each of these agencies was the most helpful agency contacted. The most frequent reason given for their perception of these agencies as "most helpful" was that they got help.

Of the two respondents who perceived that Government of the Northwest Territories as the most helpful agency contacted, one suggested that this agency was dependable and prompt and the other stated that he "got help". A number of other agencies were mentioned as the most helpful agency, and were contacted by one respondent each. These agencies were: A.R.D.A., Education for Servicemen's children, H.R.D.A., Institutional Services, Native Brotherhood Society, Future Society, Salvation Army, Wozard of Iz, Industrial Overload, Manpower Temporary Help, Band Welfare, Metis Rehabilitation Branch, Reserve Placement and Assistance, and an unspecified agency.

Table 6:8 below presents the agencies that the non-native youth contacted and found most helpful.

TABLE 6:8

Most Helpful Agency Contacted by Non-Native Youth and Why Helpful

Agency by Type	Reasons Why Most Helpful					
	Total Frequency		Favorable Attitude		Dependable & Prompt	
	N ¹	%	N ²	%	N	%
I. Government Agency	2	66.7	-	-	1	50.0
1) Department of Social Development	1	33.3	-	-	1	100.0
2) Education of Service-men's Children Act	1	33.3	-	-	-	-
IV. Private, non-volunteer, non-profit, non-native agency	1	100.0	N ³		-	-
1) Central Volunteer Bureau	1	100.0	1	100.0	-	-
			1	100.0	1	100.0

1. Total N = 3 responses; 2. Total N = 2 responses; 3. Total N = 1 response.

The data from Table 6:8 shows that three agencies were viewed as most helpful by the non-native sample. These agencies are: The Department of Social Development, the Education of Servicemen's Children Act, and the Central Volunteer Bureau. A comparison of the contacts with agencies as to the perceived most helpful agency is inconclusive, because of the relatively small number of agencies contacted by the non-native sample.

ii) LEAST HELPFUL AGENCY

Table 6:9 below presents the agencies that the native youth respondents contacted and found least helpful. The reasons why these agencies were found least helpful are categorized for each agency mentioned.

Comparable data for the non-native sample is not available, because of the high non-response rate for this item.

TABLE 6:9

Least Helpful Agency Contacted by Native Youth and Why Least Helpful

Agency By Type	Total Frequency		Reasons Why Least Helpful								Uncooperative				Irrelevant				Don't Trust			
	N ¹		N ²		No Help		Could Have Helped More		Uncooperative		Irrelevant		Don't Trust									
	N	%	N	%	N	%	N	%	N	%	N	%	N	%								
I. Government Agency	35	76.1	25	71.4	2	5.7	2	5.7	2	5.7	2	5.7	-	-								
1) Canada Manpower	20	43.5	14	70.0	1	5.0	1	5.0	1	5.0	-	-	-	-								
2) Dept. of Indian Affairs & Northern Development	4	8.7	4	100.0	-	-	-	-	-	-	-	-	-	-								
3) Dept. of Social Development	10	21.7	7	70.0	-	-	-	-	1	100.0	2	20.0	-	-								
4) Government of North-West Territories	1	2.2	-	-	1	100.0	-	-	-	-	-	-	-	-								
IV. Private, Non-volunteer, non-profit, non-native agency	7	15.2	3	42.5	-	-	-	-	1	14.3	-	-	1	14.3								
1) McDougall House	1	2.2	-	-	-	-	-	-	-	-	-	-	1	100.0								
2) Single Men's Hostel	6	13.0	3	50.0	-	-	-	-	1	16.7	-	-	1	16.7								
V. Private, profit, non-native or native agency	1	2.2	1	100.0	-	-	-	-	-	-	-	-	-	-								
1) Industrial overload	1	2.2	1	100.0	-	-	-	-	-	-	-	-	-	-								
VI. Private, non-volunteer, non-profit, native agency	1	2.2	-	-	1	100.0	-	-	-	-	-	-	-	-								
1) Metis Rehabilitation Branch	1	2.2	-	-	1	100.0	-	-	-	-	-	-	-	-								
VII Unspecified	2	4.3	N O N		-	-	R E S P O N S E		-	-	-	-	-	-								

1. Total N = 46 responses; 2. N = 35 responses.

The data in Table 6:9 suggest that along with the government agencies being perceived as the most helpful agencies (see Table 6:7), the government agencies are also seen as least helpful (76.1% of the 46 responses). However, the high percentage of respondents who viewed Canada Manpower as least helpful explains this finding. The most frequent reason given for the perception of least helpful was that no help was given.

It is also interesting to note that ten (21.7%) of the total NN=46) unfavorable responses referred to the Department of Social Development, as compared to twenty (29.0%) of the total (N=66) favorable responses presented in Table 6:7. This suggests that the majority still view the Department of Social Development as helpful. The most common reason for the perception of "least helpful agency contacted" for this agency was that the respondent did not get help. Three out of these ten responses also suggested that the handling and service of the Department of Social Development was irrelevant and uncooperative.

Six (13.0%) responses stated that the Single Men's Hostel was the least helpful agency contacted. The major reasons for this perception were that they did not obtain help, the agency was uncooperative, and distrustful.

Also, one response was given for each of the following agencies, perceived as least helpful: the Government of the Northwest Territories, McDougall House, Industrial Overload and the Metis Rehabilitation Branch.

This analysis suggests that the most unfavorable experiences in terms of helpfulness again occurred in contact with Canada Manpower. A good proportion (one-quarter) also viewed the Department of Social Development as unhelpful and also one-sixth of the unfavorable responses were in terms of the Single Men's Hostel.

iii) ATTITUDE OF AGENCY AND EXTENT OF DISCRIMINATION

Here the attitudes of the agencies contacted for self are analyzed for both the native and non-native samples. The data for the native youth is presented below in Table 6:10.

TABLE 6:10

Attitude of Agency that Native Youth Contacted

by Type	General Attitude								Less Cooperative Because of Ethnic Origin			
	Frequency		Very Cooperative		Somewhat Cooperative		Uncooperative		Yes		No	
	N ¹	%	N	%	N	%	N	%	N	%	N	%
Government Agency	117	70.5	N = 117		24	20.5	54	46.2	35	29.9	39	33.3
R.D.A.	1	.6	1	100.0	-	-	-	-	Non-response			
Canada Manpower	28	16.9	3	10.7	9	32.1	19	67.8	14	50.0	14	50.0
Dept. of Indian Affairs & Northern Development	32	19.3	8	25.0	20	62.5	2	6.2	7	21.9	21	65.6
Dept. of Social Development	55	33.1	11	20.0	25	45.4	14	25.4	18	32.7	27	49.1
Education of Indian Children	1	.6	1	100.0	-	-	-	-	-	-	1	100.0
Private, volunteer, profit, native agency	11	6.6	N = 11		5	45.4	2	18.2	-	-	5	45.4
U.D.S. Church (Mormon) Development Program	1	.6	1	100.0	-	-	-	-	-	-	1	100.0
Native Brotherhood Society	8	4.8	3	37.5	1	12.5	-	-	-	-	2	25.0
Native Friendship Society	2	1.2	1	50.0	1	50.0	-	-	-	-	2	100.0
Private, volunteer, profit, non-native,	5	3.0	N = 5		1	20.0	2	40.0	1	20.0	2	40.0
Catholic Family & Services	1	.6	N O N R E S P O N S E									
Future Society	1	.6	-	-	1	100.0	-	-	-	-	1	100.0
Marian Centre	1	.6	-	-	1	100.0	-	-	NON - RESPONSE			
St. Patrick's Church	1	.6	-	-	-	-	1	100.0	-	-	1	100.0
Salvation Army	1	.6	1	100.0	-	-	-	-	NON - RESPONSE			
Private, non-volun- teer, non-profit, non- agency	20	12.0	N = 20		5	25.0	10	50.0	5	25.0	4	20.0
Milltop House	1	.6	-	-	-	-	1	100.0	1	100.0	-	-
John Howard Society	1	.6	-	-	1	100.0	-	-	1	100.0	-	-
McDougall House	3	1.8	-	-	3	100.0	-	-	-	-	2	66.7
Single Men's Hostel	12	7.2	5	41.7	3	25.0	4	33.3	1	8.3	8	66.7
W.C.A.	3	1.8	-	-	3	100.0	-	-	1	33.3	1	33.3
Private, profit, non- agency	6	3.6	N = 6		1	16.7	2	33.3	2	33.3	1	16.7
Chartered Bank	1	.6	1	100.0	-	-	-	-	-	-	1	100.0
Industrial Overlook	2	1.2	-	-	-	-	1	50.0	1	50.0	1	50.0
Manpower Temporary Service	3	1.8	-	-	2	66.7	1	33.3	-	-	3	100.0
Private, non-volunteer, profit, native agency	5	3.0	N = 5		2	40.0	1	20.0	-	-	4	80.0
Food and Welfare	2	1.2	-	-	1	50.0	-	-	-	-	2	100.0
Reserve Placement & Finance	3	1.8	2	66.7	-	-	-	-	-	-	2	66.7
Agency Unspecified	2	1.2	N = 2		1	50.0	-	-	-	-	Non-response	

N¹ = total number of responses, 166

The results from Table 6:10 suggest that the most unfavorable attitudes were perceived in terms of the government agencies. Twenty-nine point nine per-cent (N=35) of the contacts with the government agencies, perceived these agencies as uncooperative, and 33.3% (N=39) viewed this uncooperativeness as a result of discrimination due to their native origin. This is explained in that the majority (67.8%, N=19) of responses re Canada Manpower indicated this agency's attitude as uncooperative. Another 32.1% (N=9) viewed Canada Manpower as somewhat cooperative. The Departments of Indian Affairs and Northern Development, and Social Development were also viewed unfavorably. Twenty-five point four per-cent of the responses indicated that the attitude of the Department of Social Development was uncooperative and another 45.4% (N=25) viewed this agency as only somewhat cooperative. Only 6.2% (N=2) of the responses indicated that the Department of Indian Affairs and Northern Development was uncooperative, but an additional 62.5% (N=20) perceived this agency as only somewhat cooperative. Also 21.9% (N=7) saw the uncooperativeness of the Department of Indian Affairs and Northern Development as due to discrimination; and also another 32.7% saw the uncooperativeness of the Department of Social Development as due to discrimination.

Another category of agencies - private, non-volunteer, non-profit, non-native agencies were also viewed as uncooperative (25.0%, N=5) and/or only "somewhat cooperative" (50.0%, N=10). This is due mainly to the perceived uncooperativeness of the Single Men's Hostel. One-third (4 of the 12) respondents who contacted this agency perceived it as uncooperative, while another 25.0% (n=3) perceived it as only somewhat cooperative. However, only one respondent (8.3%) saw this uncooperativeness as due to discrimination. The one respondent who contacted Hilltop House saw its attitude as uncooperative and due to discrimination. Of the three respondents who contacted the Y.W.C.A., all three perceived this agency's attitude as only "somewhat cooperative".

Of the three respondents who contacted Manpower Temporary Help Service, two perceived this agency as somewhat cooperative and the other perceived this agency as uncooperative.

The respondents who contacted A.R.D.A., Education of Servicemen's Children Act, LDS Church, Salvation Army, Chartered Bank, and Reserve Placement and Assistance, perceived these agencies' attitudes as very cooperative.

The over-all experience with private, volunteer, non-profit, native agencies was perceived as favorable. Forty-five point four per cent of the native respondents (5 out of 11) saw these agencies as very cooperative.

This analysis suggests that the most uncooperative attitudes of agencies were perceived in terms of Canada Manpower, Single Men's Hostel, Department of Social Development, Department of Indian Affairs and Northern Development, St. Patrick's Church, Y.W.C.A., Industrial Overload and Manpower Temporary Help Service. This uncooperativeness was perceived as due to the respondent's ethnic origin, especially in terms of Canada Manpower, Department of Social Development, and Department of Indian Affairs and Northern Development. Again, where the response rate or contact is low (below 10), the inferential power of the related findings is also low.

The attitudes of the agencies contacted for self are presented below in Table 6:11 for the non-native youth.

TABLE 6:11

Attitude of Agency That Non-Native Youth Contacted

Agency By Type	Frequency	GENERAL ATTITUDE						LESS COOPERATIVE BECAUSE OF ETHNIC ORIGIN			
	N	%	Very Cooperative	Somewhat Cooperative	Uncooperative	N	%	Yes	No	%	%
I. Government Agency	5	83.3	2	40.0	1	20.0	-	-	3	60.0	
1) Canada Manpower	2	33.3	-	-	1	50.0	-	-	1	50.0	
2) Department of Social Development	3	50.0	2	66.7	-	-	-	-	2	66.7	
IV. Private, non-volunteer, non-profit, non-native agency	1	16.7	N O N	-	-	R E S P O N S E					
1) Central Volunteer Bureau	1	16.7	N O N	-	-	R E S P O N S E					

1. Total N = 6 responses.

The data from Table 6:11 suggest that the perceived attitude of agencies contacted is generally favorable. Only one agency was perceived as "somewhat" cooperative by one respondent - Canada Manpower. There was no indication of discrimination due to ethnic origin. The majority of the contacts with the Department of Social Development resulted in favorable perceptions.

This analysis suggests that not only is the agency contact much smaller for the non-natives, but the perceived attitudes are more favorable. Further interpretation in comparing the two sample's perception of the agencies' attitudes toward them is hindered by the low number of responses for the non-native sample.

HESITANCY TO CONTACT AGENCY AGAIN

The data analysis in this section will attempt to pin-point the extent of dissatisfaction with specific agencies, by analyzing what proportion of those respondents who contacted specific agencies would hesitate to contact these agencies again. The data re the extent of native youth hesitancy to contact agencies again is presented in Table 6:12. Comparable data for the non-native sample was not available because of the high rate of non-response on this item.

TABLE 6:12

Extent of Hesitancy to Contact Agencies Again

<u>Agencies by Type</u>	<u>Frequency</u>		<u>Total Number</u>
	<u>N</u>	<u>%</u>	<u>of Contacts</u>
<u>I. Government Agencies</u>			
1) Canada Manpower	28	46.7	60
2) Department of Indian Affairs and Northern Development	12	37.5	32
3) Department of Social Development	19	34.5	55
<u>III. Private, Volunteer, Non-profit, Non-Native</u>			
1) Future Society	1	100.0	1
<u>IV. Private, Non-Volunteer Non-profit, Non-native</u>			
1) McDougall House	1	33.3	3
2) Single Men's Hostel	6	50.0	12
<u>V. Private, Non-volunteer Non-profit, Native</u>			
1) Metis Association of Alberta	1	100.0	1

The data in Table 6:12 suggests that of the sixty respondents that have contacted Canada Manpower for themselves, twenty-eight (46.7%) would hesitate to go back. Also, of the two respondents who contacted the Future Society and the Metis Association of Alberta (one each), both indicated they would hesitate to recontact these agencies.

Fifty percent (or 6 out of 12) of the respondents who contacted the Single Men's Hostel would hesitate to go back. Of the thirty-two contacts with the Department of Indian Affairs and Northern Development, twelve (37.5%) would hesitate to recontact this agency. Also, more than one-third (34.5%; 19 out of 55 contacts) would hesitate to contact the Department of Social Development again. Out of the three contacts made with McDougall House, only one would hesitate to go back.

This data analysis re-affirms the results detailed in the first portion of this chapter. The most unfavorable experiences seem to have occurred in contact with the following agencies: Canada Manpower, Single Men's Hostel, Department of Indian Affairs and Northern Development and the Department of Social Development.

Perception of Adequacy of Agencies

The analysis of the perception of agency service adequacy was divided into two parts: i) perceptions by those who have contacted agencies
ii) perceptions by those who have not contacted agencies

The native youth were surveyed in terms of their perceptions of the adequacy of native agencies, while the non-native youth were surveyed in terms of their perceptions of the adequacy of agencies in Edmonton.

The total number of native youth respondents who approached agencies is 89, and the total number of non-native youth who have contacted agencies is 8. Therefore, due to the inequality of N's and the small N for the non-native sample, the comparison of data for those who have contacted agencies is correspondingly restricted.

Table 6:13 below presents the comparable perceptions of adequacy of native agencies by native youth respondents for both those who have contacted an agency and those who have not.

TABLE 6:13

Native Youth Perception of Adequacy of Native Agencies

<u>Adequacy Criterion</u>	<u>Have Contacted Agency¹</u>						<u>Have Not Contacted Agency²</u>					
	<u>Adequacy</u>		<u>Sometimes</u>		<u>No</u>		<u>Adequacy</u>		<u>Sometimes</u>		<u>No</u>	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Adequate Number	20	22.5	-	-	67	75.3	31	23.0	-	-	76	56.6
Meeting to Needs	53	59.6	5	5.6	27	30.3	54	40.0	2	1.5	50	37.0
Variety of Services	24	27.0	-	-	67	75.3	31	23.0	1	0.7	77	57.0
General Inadequacy	68	76.4	3	3.4	20	22.5	76	56.3	-	-	31	23.0

¹ Total N = 89

² Total N = 135

From Table 6:13 it can be seen that the general pattern of perceived adequacy is the same for both those native youth who have contacted native agencies, and those who have not contacted native agencies. Therefore, any further discussion will include both sub-sets of the sample and will be in terms of native youth.

The majority of the native youth perceive the number of native agencies, the variety of services offered, and the agencies in general as inadequate. This is especially true for those native youth who have contacted agencies.

However, the majority of the native youth perceive the native agencies as catering to their needs. This finding is not as clear for the native youth who have not contacted agencies (40.0% Yes to 37.0% No).

A comparable analysis to the native youth perceptions of adequacy of agencies is presented for the non-native respondents in Table 6:14.

TABLE 6:14

Non-Native Youth Perception of Adequacy of Native Agencies

Adequacy Criterion	Have Contacted Agency ¹								Have Not Contacted Agency ²							
	Yes		Adequacy Sometimes		No		Non- Response		Yes		Adequacy Sometimes		No			
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Adequate Number	1	12.5	-	-	5	62.5	2	25.0	66	37.3	1	.6	83	46.9		
Catering to Needs	1	12.5	-	-	5	62.5	2	25.0	54	30.5	1	.6	87	49.2		
Variety of Services	1	12.5	-	-	5	62.5	2	25.0	70	39.5	-	-	74	41.8		
General Inadequacy	5	62.5	-	-	1	12.5	2	25.0	98	55.4	-	-	45	25.4		

1 Total N = 8

2 Total N = 177

The data here for non-native youth are in general correspondence with the data for the native youth. The number of agencies, variety of

services and general services are seen as inadequate by the non-native youth. However, a major difference does occur between the native and non-native youth samples. The non-native youth do not see the agencies available as catering to the needs of the people, whereas the native youth do.

Reasons for Not Contacting Agencies

The following analysis may help explain why there is a much lower contact with agencies by the non-native, as compared to the natives. Table 6:15 presents the data and the reasons why both samples have not contacted agencies. The number who have not contacted agencies is 182 for non-native youth, and 135 for native youth.

TABLE 6:15

Why No Contact With Agencies

<u>Reasons</u>	Native Youth ¹		Non-Native Youth ²	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
1) No need to	57	42.2	118	64.8
2) No knowledge	24	17.8	31	17.0
3) Heard not useful	13	9.6	10	5.5
4) Mother always went	11	8.1	-	-
5) Father always went	3	2.2	-	-
6) Word of Government	1	.7	-	-
7) Family Well-off	1	.7	-	-
8) Once wouldn't help	1	.7	-	-
9) Not helpful	1	.7	1	.5
10) Other	6	4.4	18	9.9

1 Total N = 135

2 Total N = 182

P < .05

The data in Table 6:15 suggest that the major reason why native youth have not contacted agencies is because they had no need to (42.2%). The second most frequent reason was that they have no knowledge of agencies or services (17.8%), and the third most frequent reason for no agency contact for native youth is that they have heard the agencies and services were not useful (9.6%). The fact that the mother or father always went (10.3%) because many of the native youth are too young to approach agencies on their own behalf.

The comparable data for non-native youth is generally equivalent to that of the native youth in terms of reasons for not contacting agencies, however significant differences are present ($P < .05$). A larger amount of non-native youth versus native youth, have not had any need to contact agencies. However, none of the non-native respondents indicated that their fathers or mothers went to agencies for them and the entire family. This finding does not back up the suggestion that the low contact of non-native youth with agencies was due to the relatively younger age of this sample. Therefore, it is suggested that the major reason for the low contact with agencies for the non-native youth sample may be mainly due to socio-economic considerations, in that the socio-economic composition for the two student sub-samples may be different.

Native Youth Contact with Agencies Re Specific Needs

This section of analysis applies only to the native youth sample's contact with agencies. This native youth contact will be analyzed in terms of the following suggested needs: money, counselling, and help. Table 6:16 presents the findings on this issue.

TABLE 6 :16

Native Youth Contact with Agencies Re Specific Needs

Suggested Needs	Agency Contacted ¹					
	Dept. of Indian Affairs		Dept. of Social Development		Native Associations	
	N	%	N	%	N	%
1) Counselling	18	8.0	27	12.0	15	6.7
2) Help	52	23.2	73	32.6		
3) Money	22	9.8	42	18.8		

¹ Total N = 724

The data in Table 6:16 suggests that none of the three agencies listed have been approached by the majority of the respondents in terms of any of the suggested needs. One-third (32.6%) of the respondents stated that they have contacted the Department of Social Development asking for help. Another 18.8% have contacted this agency for money, and another 12.0% have contacted this agency for counselling. However considering the results of the contacts and the native-youth perceptions of this agencies' cooperativeness, etc., it is suggested that the majority of the time these needs were not met by this agency.

Also, 23.2% of the native youth contacted the Department of Indian Affairs for help, 9.8% contacted this agency for money, and 8.0% contacted this agency for counselling. However, the native youth perceptions of the adequacy of this agency in terms of cooperation, etc., also suggests that many of these needs were not met by this agency.

Another fifteen (6.7%) of the native youth sample contacted native associations in general for counselling. Since the total general adequacy, adequacy of services, and adequacy of number of agencies is perceived as low by the native youth sample, we can assume that this specified counselling need may not have been satisfied by native associations, or the need of counselling may not be a need of the native youth.

The data analysis in this section is directly related to the analysis in the above sections of this chapter. Due to the perceived uncooperativeness, inadequacy of number of agencies, inadequacy of services, and lack of helpfulness resulting from native youth contact with agencies (and non-native contact to a much smaller degree of relevance), it is suggested that if a contact is made with an agency in terms of a need (money, counselling or help in general) there is a strong possibility that this need will not be satisfied.

Summary

The native youth samples have had much more contact with employment agencies than the control non-native sample. Of the youth who contacted an employment agency for a job, a large majority of both native and non-native youth have contacted Canada Manpower and a small number of native youth have contacted the Indian Affairs Branch. Part of the explanation for the low percentage of contact with employment agencies in terms of the student samples is seen in the age and need factors, i.e. fewer students are looking for jobs than non-students. The majority of the contact with government agencies in terms of looking for employment, resulted in dissatisfaction and no jobs for both samples. The contact with Canada Manpower was the most unfavorable. Half of the contacts with the Indian Affairs Branch were also unfavorable. There was minimal contact with other agencies, either native or non-native, in terms of specific employment needs.

Also, a larger percentage of the native youths' families contacted agencies, as compared with the non-native youths' families. One of the major reasons for this may be the lower socio-economic status of the native youth population, which was not measured here. Again, the major agencies contacted were government agencies, and the major dissatisfaction was stated in terms of Canada Manpower. The majority of the contact with the Departments of Indian Affairs and Northern Development, and Social Development resulted in the respondents' families being satisfied with the quality and quantity of service, and viewing the attitude of these agencies as at least "somewhat cooperative". The native youth family contact with other types of agencies was minimal, i.e. Native Brotherhood Society, Salvation Army, Single Men's Hostel, etc.. The majority of the reported satisfaction with a non-governmental agency was with the Native Brotherhood Society. The majority of the few

contacts made by non-native youths' families were made with Canada Manpower. The results of these contacts were inconclusive. The reactions to the quality and quantity of the service and the perceived attitude of the agency were almost equally favorable and unfavorable.

The analysis of the agencies contacted by the native youths' friends and the results, provided additional information about agency contact. The most unfavorable experience was in contact with Canada Manpower, while a sizeable percentage of the unfavorable experiences were also with the Departments of Indian Affairs and Northern Development, and Social Development.

From the analysis of the data concerning the respondents' contact with agencies, the above conclusions were again confirmed. The most helpful agency type mentioned was government agencies. The two most frequently stated "most helpful agency" were the Department of Indian Affairs and Northern Development, and the Department of Social Development. The most frequent reason why these two agencies were viewed as the most helpful was that the respondent got help. Canada Manpower, Single Men's Hostel, Y.W.C.A. and the Government of the Northwest Territories were also mentioned as most helpful agencies by more than one respondent. The contacts with agencies by the non-native control sample were minimal, thus reducing the usefulness of a comparison across samples.

The most unfavorable experiences in terms of helpfulness, again occurred in contact with Canada Manpower, the Department of Social Development and the Single Men's Hostel. The majority of the native responses re Canada Manpower indicated that this agency's attitude is generally perceived as uncooperative. Some of the native youth also viewed the Departments of Indian Affairs and Northern Development, and Social Development as unfavorable.

One third of the respondents who contacted the Single Men's Hostel also viewed it as uncooperative. The uncooperativeness of the agencies contacted was sometimes due to the respondents' native ancestry especially in terms of Canada Manpower and the Departments of Social Development, and Indian Affairs and Northern Development. The perceived attitudes of the agencies contacted by non-native youth for themselves, were more favorable. However, again the non-native youth response rate and contact with agencies was minimal.

The most unfavorable experiences in terms of native youth contact with agencies seems to have occurred in contact with the following agencies: Canada Manpower, Single Men's Hostel, the Department of Social Development, and the Department of Indian Affairs and Northern Development.

Some (1/3 to 1/2) of the native youth who have contacted these agencies, would hesitate to go back. Some respondents stated that they would also hesitate to contact the following agencies: McDougall House, Metis Association of Alberta, and the Future Society.

The majority of the native youth and non-native youth perceive the number of native agencies, the variety of services offered and the agencies in general as inadequate. This is especially true for those native youth who have contacted agencies versus those who have not contacted agencies. Also, the majority of the native youth perceive the native agencies as catering to their needs. However, the non-native youth do not see the agencies as catering to the needs of the people.

The larger amounts of both the native and non-native youth have not contacted agencies because they have not had the need to. Three other frequently stated reasons for no agency contact by the native youth were: they have no knowledge of agencies or services, their mother or father always went and they have heard the agencies and services are not useful.

A few of the native youth respondents (12.0% to 32.6%) stated that they have contacted the Department of Social Development for help, money or counselling. However, considering the results of these contacts and the native-youth perceptions of this agency's service, it is suggested that it is unlikely that these needs were met. The same is true for the Department of Indian Affairs. From eight to twenty-three percent have contacted this agency for help, money and/or counselling, but it is suggested that probably many of these needs were not met by this agency.

One very interesting finding is the low amount of native youth contact with native agencies. The Department of Indian Affairs Agency, specially set up for natives, is the most often contacted by natives. The other native agencies were minimally (1 to 3 contacts) contacted, i.e. Metis Rehabilitation Branch, Reserve Placement and Assistance, Native Friendship Centre, Mormon Placement Program, and the Native, and Metis Association of Alberta. It may well be that the relative "newness" of the native - run agencies in part accounts for this lack of use.

In conclusion, if a contact is made with an agency in terms of some need (money, counselling, general help, etc.) there is a strong possibility that this need will not be satisfied. There is an even greater likelihood that if a native youth has a specific need, he will not even approach an agency for help.

CHAPTER VII

THE EDUCATION INFORMATION

Introduction:

A similar descriptive content analysis will be carried out in terms of the educational variables for the native youth sample, as was carried out for the agency information. The education variables of the native youth will be analyzed in terms of comparable data for the non-native sample. It is important to state once again that the descriptive analysis must be evaluated in combination with the latent structure of the data analyzed by the component analysis in Chapters IX to XI below.

It will be remembered from Chapter V that there are 143 native students, seven (4.9%) of whom are in attendance part time and 124 (86.7%) full-time students. These native students vary from 11 to 23 years old, as compared to 11 to 19 years old for the non-native students. Also, the native youth tend to be older than their class-mates. Both student samples come from comparable types of schools (for example: public junior high) and schools similarly characterized by location in Edmonton.

It is also important to remember that the native youth tend to be in vocational, technical, business and/or commercial courses of study rather than the matriculation program.

This chapter deals with a content analysis of the following issues and concepts:

- 1) Attitudes of native youth toward school administration, guidance counsellors, teachers, and other students.
- 2) Adjustment to school.
- 3) Perceived discrimination and prejudices of teachers.
- 4) Educational goals and needs.

- 5) Perception of subjects' difficulty, usefulness and relevance.
- 6) The circumstances under which the native youth have considered leaving school.
- 7) Assessment of whether the educational system is meeting educational goals and needs.

This analysis applies only to the student native sample, as compared to the non-native student sample.

Attitudes Towards School Administration

This section deals with the perceptions of the school administration in general.

TABLE 7:1

Perception of Administration

<u>Attitude</u>	Native Youth		Non-Native Youth	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Fine or Good	43	30.1	52	27.4
Average	49	34.3	65	34.3
Poor	33	23.1	48	25.3
Non-response	18	12.5	25	13.0
TOTAL	143	100.0%	190	100.0%

$P > .05$

The data in Table 7:1 suggests that there is no difference between the attitudes of the native and non-native youth toward the school administration ($P =$ not significant). The perception of both samples are approximately equally distributed among the fine, average, and poor response categories, and therefore the results are inconclusive.

Attitudes Toward Guidance Counsellors

This section deals with the attitudes toward the school guidance counsellors, and is restricted to those students who have had contact with guidance counsellors. 105 out of the 143 (67.2%) native youth, and 95 out of the 190 (50.0%) non-native youth have had contact with the school guidance counsellors. This suggests that relatively more native youth than non-native youth have had contact with guidance counsellors.

TABLE 7:2

Perception of Guidance Counsellors

<u>Attitude</u>	Native Youth		Non-Native Youth	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Fine or Good	35	33.3	53	55.8
Average	49	46.7	50	31.6
Poor, or not useful	21	20.0	12	12.6
	<hr/>		<hr/>	
TOTAL CONTACTS	105	100.0%	95	100.0%

$P < .05$

The data in Table 7:2 suggest that noticeably more native youth perceive the guidance counsellors they have contacted as poor (not useful) or "just" average. Also, a comparatively lower percentage (33.3% versus 55.8%) of native youth perceive the guidance counsellors they have contacted as fine or good. This would suggest that the native youth do not view their contact with guidance counsellors as favorably as the non-native youth do.

Attitudes Toward Teachers

Table 7:3 deals with the native youth versus non-native youth perceptions of their teachers.

TABLE 7:3

Perception of Teachers

<u>Attitude</u>	Native Youth		Non-Native Youth	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Fine or Good	39	27.3	59	31.1
Average	76	53.2	102	53.7
Poor	19	13.3	18	9.4
Non-response	9	6.2	11	5.8
	<hr/>		<hr/>	
TOTAL	143	100.0%	190	100.0%

$$P > .05$$

The data in Table 7:3 suggest that the perceptions of teachers are not noticeably different for the native versus the non-native samples ($P = \text{Not significant}$). A few more natives viewed their teachers as poor (13.3% versus 9.4%), but the difference is not appreciable. The majority of both the native and non-native samples viewed their teachers as average, while another third of each sample viewed their teachers as fine or good.

Attitudes Toward Other Students

The table below (Table 7:4) presents data on the respondents' attitudes toward other students.

TABLE 7:4

Perception of Other Students

<u>Attitude</u>	<u>Native Youth</u>		<u>Non-Native Youth</u>	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Good or Fine	41	28.7	57	30.0
Average	86	60.2	117	61.5
Bad or Poor	3	2.1	4	2.1
Non-response	13	9.0	12	6.4
	<hr/>		<hr/>	
TOTAL	143	100.0%	190	100.0%

$P > .05$

The data analysis in this section (Table 7:4) suggests that the attitudes toward other students for the native and non-native students are almost identical ($P = \text{Not significant}$). Again, most of the students view their fellow students as average, while another third view them as good or fine.

Adjustment to School

This concept is closely related to the respondents' attitudes toward the administration, guidance counsellors, teachers and other students. From the analysis above (Tables 7:1 to 7:4) it can be concluded that the native youth seem to be as well adjusted as the non-native students to school, excluding their perceptions of guidance counsellors. This will be further analyzed in Chapters IX to XI below.

A closer look at the respondents' relationships with other students in school is presented below.

1) Possession of Non-Native Friends

The native youth were asked if they had non-native friends, while the non-native youth were simply asked if they had friends. This data is presented in Table 7:5.

TABLE 7:5

Possession of Non-Native Friends

<u>Possession of Non-Native Friends</u>	<u>Native Youth</u>		<u>Non-Native Youth</u>	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Yes	118	82.5	188	98.9
No	15	10.5	2	1.1
Non-response	10	7.0	0	-
	<hr/>	<hr/>	<hr/>	<hr/>
TOTAL	143	100.0%	190	100.0%

$P < .05$

The data in Table 7:5 suggests that the native youth have noticeably fewer non-native friends than a control group of non-natives ($P < .05$). However, the ethnic origin of the non-native youth sample is not known except that they are of non-native ancestry. Nevertheless, the overall adjustment of the native youth sample in terms of possession of non-native friends is high, for 82.5% of the sample do have non-native friends.

2) Perceived Trouble in Making School Friends

The table below (Table 7:6) presents data on the native and non-native youth perceptions of their ease in making school friends.

TABLE 7:6

<u>Trouble in Making School Friends</u>				
<u>Perceived Trouble</u>	<u>Native Youth</u>		<u>Non-Native Youth</u>	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Yes	19	13.3	42	22.1
Sometimes	1	0.7	4	2.1
No	116	81.1	144	75.8
Non-response	7	4.9	0	-
	<hr/>	<hr/>	<hr/>	<hr/>
TOTAL	143	100.0%	190	100.0% $P > .05$

The native youth do not show noticeably more difficulty in making school friends, than the non-native youth. In fact, the non-native youth seem to perceive themselves as having more difficulty in making school friends than the native youth do.

3) Perception of Other Students Liking Self

The table below (Table 7:7) presents data on the respondents' perception of other students liking self.

TABLE 7:7

<u>Perception of Other Students Liking Self</u>				
<u>Perceived Liking</u>	<u>Native Youth</u>		<u>Non-Native Youth</u>	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Yes	114	79.7	159	83.7
Sometimes	3	2.1	4	2.1
No	11	7.7	24	12.6
Non-response	<u>15</u>	<u>10.5</u>	<u>3</u>	<u>1.6</u>
TOTAL	143	100.0%	190	100.0%

The strong majority (79.7%) of native youth perceive the other students as liking them. There is no noticeable difference between the two samples in the percentage of youth who perceived the other students as liking them (P = not significant).

4) Liking of Other Students

The data in this section describes the attitude of the two samples toward the other students in their schools.

TABLE 7:8

Attitude Toward Other Students

<u>Liking</u>	Native Youth		Non-Native Youth	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Yes	117	81.8	172	90.5
Sometimes	5	3.5	7	3.7
No	10	7.0	9	4.7
Non-response	11	7.7	2	1.1
TOTAL	143	100.0%	190	100.0%

P > .05

The data in Table 7:8 suggests that the majority (81.8%) of the native youth like other students. A slightly larger proportion of the non-native youth than the native youth like the other students, however, this finding of difference is not significant (P = not significant).

5) Perception of Teachers Liking Self

The data in Table 7:9 below describes the perceived attitudes of teachers toward the respondents.

TABLE 7:9

Perceived Attitudes of Teachers

<u>Perceived Liking</u>	<u>Native Youth</u>		<u>Non-Native Youth</u>	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Yes	94	65.7	141	74.2
Sometimes	6	4.2	10	5.3
No	20	14.0	31	16.3
Non-response	23	16.1	8	4.2
	<hr/>		<hr/>	
TOTAL	143	100.0%	190	100.0%

P > .05

It can be seen from Table 7:9 that a smaller percentage of native youth versus non-native youth perceive their teachers as liking them, and a slightly higher percentage of non-native youth perceive their teachers as not liking them. However, these differences are not statistically significant (P = Not significant). The observed differences may be due in part to the larger number of non-responses for the native youth sample on this item. These non-responses can not be excluded in the calculation of the percentages, because we do not know what these non-responses mean.

6) Liking of Teachers

This item adds to the picture of the relationship between the respondents and their teachers (Table 7:10).

TABLE 7:10

Liking of Teachers

<u>Liking</u>	Native Youth		Non-Native Youth	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Yes	91	63.6	146	76.8
Sometimes	9	6.3	12	6.3
No	27	18.9	26	13.1
Non-response	16	11.2	6	3.8
	<hr/>		<hr/>	
TOTAL	143	100.0%	190	100.0%

$P > .05$

The data in Table 7:10 presents a clearer picture of the relationship of teachers and students. There is some difference between the percentage of the non-native and native youth samples that like their teachers, with a larger percentage of the non-native youth liking their teachers. Also, slightly more natives do not like their teachers, as compared to the non-natives. However, this interpretation is restricted in that the differences are not statistically significant.

A more specific discussion of the relationship between students and teachers will be presented in the "discrimination in school" section below.

All of the above items reflect on the adjustment of the student to the informal interaction in the school milieu. The following item deals with the over-all view of the respondents' adjustment to school.

7) Perception of Place in School

The data presented in Table 7:11 is to analyze the respondents' perception of his adjustment.

TABLE 7:11

Perception of Place in School

<u>Place</u>	Native Youth		Non-Native Youth	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Fits well	53	37.1	54	28.4
Average	61	42.7	89	46.8
Poorly	16	11.2	21	11.1
Non-response	13	9.0	26	13.7
	<hr/>		<hr/>	
TOTAL	143	100.0%	190	100.0%

P > .05

This suggests that the majority of both samples perceived themselves as fitting in "well" and "average" in school (79.8% and 75.2%). It is interesting to note that a slightly higher percentage of native youth than non-native youth perceive themselves as fitting in well in their school, but this difference is not statistically significant.

Perceived Discrimination and Prejudice of Teachers

This section deals with the respondents' perceptions of discrimination and prejudice in their teacher's interactions with them.

Table 7:12 presents the perceived helpfulness of the respondents' teachers.

TABLE 7:12

Perceived Helpfulness of Teachers

<u>Helpfulness</u>	Native Youth		Non-Native Youth	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Yes	109	76.2	148	77.9
Sometimes	5	3.5	14	7.4
No	19	13.3	25	13.2
Non-response	10	7.0	3	1.5
	-----	-----	-----	-----
TOTAL	143	100.0%	190	100.0%

P > .05

The data in Table 7:12 suggests that the perceived helpfulness of teachers is the same for both native and non-native students (P = not significant). In both samples, over three-quarters of the respondents perceived their teachers as helpful.

Table 7:13 presents the perceived occurrence of humiliating examples made by the respondents' teachers.

TABLE 7:13

Occurrence of Humiliating Examples

<u>Presence</u>	Native Youth		Non-Native Youth	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Yes	80	55.9	121	63.7
Sometimes	1	0.7	1	0.5
No	55	38.5	66	34.7
Non-response	7	4.9	2	1.1
	<hr/>		<hr/>	
TOTAL	143	100.0%	190	100.0%

$P > .05$

It can be seen from Table 7:13 that the majority of both samples indicate that their teachers have made examples that have humiliated the respondents ($P =$ Not significant). It is even more interesting to see that a larger percentage of the non-native (63.7%) versus the native students (55.9%) indicate that their teachers have humiliated them by their examples. This suggests that the teachers are not being discriminatory in terms of unfavorable attitude toward the native versus the non-native students.

The data in Table 7:14 presents the respondents perceptions of unnecessary teacher punishment.

TABLE 7:14

Occurrence of Unnecessary Teacher Punishment

<u>Occurrence</u>	Native Youth		Non-Native Youth	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Yes	28	19.6	68	35.8
Sometimes	1	0.7	6	3.2
No	106	74.1	111	58.4
Non-response	8	5.6	5	2.6
	<hr/>		<hr/>	
TOTAL	143	100.0%	190	100.0%

$P < .05$

It can be seen from the data in Table 7:14 that a much larger percentage of non-native youth than native youth indicate their teachers punish them unnecessarily (35.8% versus 19.6%). This item also suggests that the native youth are not relatively unfairly treated and discriminated against by their teachers.

Educational Goals and Needs

This section deals with the respondents' indication of his educational goals and needs. Therefore, the respondents' desired grade level and indications why this grade level is sufficient, are analyzed.

TABLE 7:15

Desired Grade Level

<u>Grade Level</u>	Native Youth		Non-Native Youth	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Complete post-secondary	2	1.4	95	50.0
Some post-secondary	14	9.8	3	1.6
Grade 12	108	75.5	79	41.6
Some High School	6	4.2	3	1.6
Grade 9	-	-	2	1.1
Grades 6, 7 or 8	2	1.4	1	.05
Non-response	11	7.7	7	3.6
TOTAL	143	100.0%	190	100.0%

$$P < .05$$

The data in Table 7:15 suggest that the majority (75.5%) of the native youth students have grade 12 as their educational goal, with another 9.8% stating "some" post-secondary education as their educational goal. However, 50.0% of the non-native students stated complete post-secondary education (university) as their educational goal, and another 41.6% stated Grade 12. This suggests that the educational expectations and goals are lower for the native youth, as compared to the control sample ($P < .05$).

Reason	Native Youth		Non-Native Youth	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Enter into further education	40	28.0	9	4.7
Able to make a good living	37	25.9	72	37.9
Not interested in more education	5	3.5	7	3.7
Lack ability	2	1.4	0	0
Parents expect respondent to work or respondent would rather work	0	0	6	3.1
Non-response	59	41.2	96	50.6
TOTAL	143	100.0%	190	100.0%

The non-response rate for the item in Table 7:16 was relatively high, which restricts the application of the findings. Also, the results presented in Table 7:16 are directly related to those results in Table 7:15 because a larger percentage (28.0% versus 4.7%) of native youth feel that they have specified a grade level as a goal in order to enter into further education ($P < .05$). This could help explain why a lower percentage (25.9%) of native youth stated post-secondary education as their goal, i.e. they defined grade 12 as their desired grade level to permit them to go on into further education. In comparison, 37.9% of the non-native youth stated they desired their specified grade level (mainly secondary education and fewer grade 12) in order to be able to make a good living. Therefore, the item of why the specified grade level is sufficient, is directly linked to what grade level was initially specified and the respondents' interpretation of grade level, i.e. high school grade level.

However, it does seem that the educational goal structure of the native youth sample is different than the non-native youth sample in that the native youth formulate much shorter range goals. The native youth have (75.5%) stated that their immediate educational goal is grade twelve, which may enable them to proceed to further education, or at least enable them to make a good living. In comparison, the non-native youth seem to be looking further ahead (and may be more confident in their possibility for success), more likely stating that post-secondary education is their goal (50.0%) to enable them to make a good living.

Perception of School Subjects' Difficulty, Usefulness and Relevance

This section will deal with the respondents' liking of his subjects, perception of their difficulty and usefulness.

1) Liking of Subjects. The data on whether the respondents like the subjects they are taking and the reasons for this are presented below.

TABLE 7:17

Liking of Subjects Taking

<u>Response</u>	Native Youth		Non-Native Youth	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Yes	104	72.7	121	63.7
Sometimes	1	0.7	14	7.4
No	28	19.6	52	27.4
Non-response	10	7.0	3	1.5
TOTAL	143	100.0%	190	100.0%

$P > .05$

The data in Table 7:17 suggest that approximately three-quarters of the native youth students (72.7%) like the subjects they are taking.

In comparison, noticeably fewer (less than two-thirds or 63.7%) non-native students like the subjects they are taking. However, this difference is not statistically significant.

Table 7:18 deals with the reasons given by the respondents for why they like the subjects they are taking.

TABLE 7:18

Reasons for Liking Subjects

<u>Reason</u>	Native Youth		Non-Native Youth	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Help in the future	27	34.6	13	16.7
Personal interest	38	48.7	45	57.7
Good Teachers	3	3.9	3	3.9
Gives Respondent Something to do	2	2.6	1	1.3
Likes one particular subject	8	10.3	-	-
Many positive reasons	-	-	16	20.5
TOTAL	78	100.0%	78	100.0%
Non-response & not applicable	65	N.A.	112	N.A.

The data in Table 7:18 suggest that the most common reasons stated by the native students for liking the subjects they are taking are: i) for personal interest (48.7%), and ii) to help in the future (34.6%). In comparison this is very similar (P = not significant) to the main reasons listed by non-native youth: i) personal interest (57.7%), ii) help in the future (16.7%), and iii) other multiple positive reasons (20.5%). Since the non-response rate and not-applicable was so high here, the percentages were calculated on responses only. The results in Table 7:18 apply only to those respondents who like the subjects they are taking, whereas the data in Table 7:19 applies to the respondents who don't like the subjects they are taking.

Table 7:19 deals with the reasons given by the respondents for why they did not like the subjects they were taking.

TABLE 7:19

Reasons for Not Liking Subjects

<u>Reasons</u>	Native Youth		Non-Native Youth	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
The subjects are useless & irrelevant	2	10.0	7	15.6
Subjects are boring	-	-	7	15.6
Subjects are too difficult	6	28.6	7	15.6
Poor Teachers	3	14.3	5	11.1
Does not like some subjects	5	21.4	14	31.1
Does not like school in general	4	19.0	3	6.7
Too lazy and disinterested	1	4.8	2	4.4
	<hr/>		<hr/>	
TOTAL	<u>21</u>	<u>100.0%</u>	<u>45</u>	<u>100.0%</u>
Not Applicable and Non-response	122	N.A.	145	N.A.

The data in Table 7:19 suggest that the major reasons given by the native youth students for disliking school, were that the subjects were too difficult (28.6%), that they didn't like "some" of the subjects (21.4%), and that they didn't like school in general (19.0%). In comparison, the major reasons given by the non-native youth for disliking school subjects were that they didn't like "some" school subjects (31.1%), that the subjects were too difficult (15.6%), boring (15.6%), and useless and irrelevant (15.6%).

Table 7:20 presents the subjects liked most and least by the respondents.

TABLE 7:20

Subjects Liked Most and Least

<u>Subjects</u>	<u>Liked Most</u>				<u>Liked Least</u>			
	<u>Native</u> <u>N</u>	<u>Youth</u> <u>%</u>	<u>Non-Native</u> <u>N</u>	<u>Youth</u> <u>%</u>	<u>Native</u> <u>N</u>	<u>Youth</u> <u>%</u>	<u>Non-Native</u> <u>N</u>	<u>Youth</u> <u>%</u>
Math	37	25.9	41	21.6	47	32.9	43	22.6
Social Studies	10	7.0	24	12.6	9	6.3	13	6.8
Science	15	10.5	22	11.6	27	18.9	34	17.9
French, English & Language	30	21.0	20	10.5	30	21.0	57	30.0
Art or Drama Phy. Ed.	13	9.1	26	13.7	2	1.4	4	2.1
Sociology, Psycho- logy or Religion	4	2.8	4	2.1	-	-	7	3.7
Other Subjects	20	14.0	43	22.6	6	4.2	11	5.8
Non-response	14	9.7	10	5.3	22	15.3	21	11.1
TOTAL	143	100.0%	190	100.0%	143	100.0%	190	100.0%

P > .05

The data in Table 7:20 suggest that the subjects most often mentioned by the native youth students as liked most are Math (25.9%), second, French, English, or Language (21.0%), and third, Science (10.5%). In comparison, one of the subjects most often mentioned by the non-native youth students as liked most is also Math (21.6%). However, more (though not statistically significant) non-native than native students mention Art, Drama or Physical Education, and Social Studies as "liked most".

The subject most often mentioned as "least liked" for the native students is also Math (32.9%), and second is French, English and Language (21.0%). In comparison these two subjects are also mentioned as liked least by the non-native students, but in reverse order, i.e. French, English or Language (30.0%) and then Math (22.6%).

In summary, this suggests that almost an equal number of both the native and non-native samples dislike and like Math and Languages (P=N.S.). However, there is a greater percentage of native youth than non-native youth who like languages (21.0% versus 10.5%), and there is a greater percentage of non-native youth than native youth who dislike languages, (30.0% versus 21.0%). Also a noticeably greater (thought not significantly different) percentage of native youth versus non-native youth, dislike Math (32.9% versus 22.6%). This may suggest that the native youth students are more likely to prefer languages (French, English, etc.), and then Math, while a comparable sample of non-natives are more likely to prefer Math and then Social Studies or Art; Drama and Physical Education.

2) Perception of Subject Difficulty: This item was already touched on in Table 7:19 where "subjects were too difficult" was given as a major reason why the native youth dislike certain subjects.

Table 7:21 presents data on whether the respondents perceive their subjects as difficult.

TABLE 7:21

Perception of Subject Difficulty

<u>Response</u>	Native Youth		Non-Native Youth	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Yes	41	28.7	59	31.1
Some	4	2.8	38	20.0
No	83	58.0	88	46.3
Non-response	15	10.5	5	2.6
TOTAL	143	100.0%	190	100.0%

P < .05

The results from Table 7:21 suggest that the majority of native youth students do not perceive the subjects they are taking as difficult (58.0%). However, a noticeably smaller percentage of the non-native youth perceive their subjects as not difficult (46.3%). The main difference in the two samples is that a noticeably larger percentage of the non-native youth (20.0% versus 2.8%) perceive some of their subjects as difficult, and some as not. On the over-all view, the native youth seem to be less likely than a comparable sample of non-native youth to perceive the subjects they are taking as difficult ($P = <.05$).

Table 7:22 below presents data on the perceived most difficult subjects, by both samples.

TABLE 7:22

Perceived Most Difficult Subjects

<u>Subjects</u>	Native Youth		Non-Native Youth	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Math	36	25.2	52	27.4
English or Social Studies	20	14.0	41	21.6
Physical & Social Sciences	18	12.6	18	9.5
Two or more subjects mentioned	36	25.2	36	19.0
Non-responses	33	23.0	43	22.5
TOTAL	143	100.0%	190	100.0%

$P > .05$

It can be seen from Table 7:22 that the most often listed subject as "most difficult" was Math, by both samples (25.2% native youth, 27.4% non-native youth). The second most often listed "most difficult subject" was English and/or Social Studies, for both samples.

The most common reason given by the native youth as to why their subjects were "most difficult" were: i) the subjects were too advanced, and ii) they were disinterested in the subjects. The same reasons were listed by the comparable non-native sample.

These results suggest that a larger proportion of the non-native youth than native youth state that they perceive their subjects as difficult. The reasons given for the perceived difficulty of subjects, and the subjects listed as "most difficult" are the same for the two samples, ($P =$ not significant).

3) Perception of Subject Usefulness

Table 7:23 presents data on the respondents' perceptions of the usefulness of the subjects they are taking.

TABLE 7:23

Perception of Subject Usefulness

<u>Response</u>	<u>Native Youth</u>		<u>Non-Native Youth</u>	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Yes	116	81.1	142	74.7
Some	1	0.7	18	9.5
No	17	11.9	30	15.8
Non-response	<u>9</u>	<u>6.3</u>	<u>0</u>	<u>0</u>
TOTAL	143	100.0%	190	100.0%

$P > .05$

The results in Table 7:23 suggest that slightly more (though not significantly different) native youth than non-native youth perceive the subjects they are taking as useful (81.1% versus 74.7%).

The reasons why it was felt that these subjects were useful are presented below in Table 7:24. The data in Table 7:24 apply only to those respondents who perceive their subjects as useful.

TABLE 7:24

Why Subjects are Perceived as Useful

<u>Reasons</u>	<u>Native Youth</u>		<u>Non-Native Youth</u>	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
To find a job	40	34.5	35	24.6
To further education	16	13.8	13	9.2
Necessary Prerequisite	7	6.0	13	9.2
Generally needs them	10	8.6	27	19.0
Other positive responses	-	-	7	4.9
Non-response	<u>43</u>	<u>37.1</u>	<u>46</u>	<u>33.1</u>
TOTAL	116	100.0%	142	100.0%

$P < .05$

Due to the relatively low response rate to this item by each sample, the interpretation of the data is limited. However, it seems that the most common reason why both the native and non-native students find the subjects they are taking useful, is because they will need these subjects to find a job (34.5% and 24.6%). Another 13.8% of the native youth perceived their subjects as useful for further education.

The analysis in terms of perception of subject usefulness suggests that the native youth perceive the subjects they are taking as useful, in order to find a job and for further education. This is noticeably different from the non-native control sample in reasons ($P < .05$).

Reasons for Leaving School

Of the native youth sample, 48.1% (74 out of 154 who were students, including transients) stated that they had at one time considered leaving school. In comparison, 27.9% (53 out of 190) of the non-native students stated that they have considered leaving school. Table 7:25 presents the data on the reasons given as to why the respondents have thought of leaving school.

TABLE 7:25

Reasons for Leaving School

<u>Reasons</u>	Native Youth*		Non-Native Youth**	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Stay home and help	21	28.4	4	7.5
Suggested by other students	20	27.0	8	15.1
Suggested by friends	18	24.3	8	15.1
Personal financial needs	17	23.0	7	13.2
Too old for grade	16	21.6	4	7.5
Family financial need	15	20.3	8	15.1
Absence of key family member	12	16.2	5	9.4
Suggested by teachers	12	16.2	4	7.5
Death in family	11 ,	14.9	8	15.1
Suggested by school	10	13.5	2	3.8
Suggested by parents	10	13.5	5	9.4
Suggested by family	8	10.8	3	5.7
Sickness in family	8	10.8	7	13.2
Suggested by counsellor	4	5.4	3	5.7
Doesn't like school	2	2.7	-	-
Suggested by administration	1	1.4	3	5.7

* Total N = 74 (excluding those who have not thought of leaving school)

** Total N = 53 (excluding those who have not thought of leaving school)

P > .05

The data in Table 7:25 suggest that the most common reason given by native youth for leaving school is the need to stay home and help (28.4%).¹

1 This finding is in direct congruence with the findings of Lagasse, J.H., A Study of the Population of Indian Ancestry Living in Manitoba, Vol. 1, pp. 129-130. Lagasse suggested that little progress in education can be made until the employment and economic situation of native families improves.

Other common reasons for native youth leaving school were: the pressure of other students and friends, personal and financial needs, and the fact that the respondent was too old for his grade level.

In comparison, the most common reasons given by the non-native youth sample for leaving school were: also pressure from other students and friends, also family financial need, and death in the family. However, the most common reason given by the native youth was of secondary importance to the non-native youth (staying home to help). Also, not as many non-native youth as native youth gave "too old for grade" as a reason for leaving school.

This analysis defines two responses as differentiating (though not statistically) the native and non-native youth reasons for leaving school. These reasons were: the need to stay home and help (more frequent for Native Youth), and the characteristic of being too old for their grade level, (more frequently given by native youth). This further characterizes the native youth sample as relatively older than non-natives at the same grade level, and more responsible for the respondents' family welfare.

The most common reasons given by the native youth respondents who felt they were too old for their grade level was that they had had difficulty or failed, had started to school late, and/or blamed the teacher. In comparison, the most common reasons given by the non-native youth respondents were that they had had difficulty or failed, blamed the teacher, and stated they had lack of interest in school. This defines the reasons for students being behind in grades for the two samples as similar, except that the native youth were more likely to give the reason of having started to school late.

SUMMARY

The findings of the above analyses are isolated into the specific topics, as defined below:

- 1) Based on the descriptive analysis above, the native students (compared to the non-native students) seem to be as well adjusted to school in general, excluding their perceptions of guidance counsellors.
- 2) Relatively more native students than non-native students have had contact with guidance counsellors. . Also, native students do not view their contact with guidance counsellors as favorably as the non-native students do.
- 3) Native students have significantly fewer non-native friends, as compared to non-native students (not controlling for other ethnicity of non-natives). The native students probably have many native friends as well.
- 4) The native students seem equally adjusted (as compared to non-native students) in terms of:
 - a) perceived trouble in making school friends
 - b) perception of other students liking self
 - c) liking of other students
 - d) perception of teachers liking self
 - e) liking of teachers

The statistically similar responses on these items suggest that the native and non-native students are equally adjusted in terms of the informal interaction in the school milieu. The adjustment concepts will be further clarified in Chapters X and XI below.

- 5) Both the native and non-native students view themselves as being in at least an "average" place in their schools.

- 6) There were no significant differences between the native and non-native youth in their perceptions of their teachers' helpfulness and discrimination. Also, native youth do not perceive themselves as more unfairly treated by their teachers, as compared to non-native youth.
- 7) The educational expectations and goals of the native students seem to be lower, as compared to the non-native students. This may be explained by the fact that the native students seem to formulate shorter range goals. The immediate native youth goal was grade 12, while the immediate non-native youth goal was post-secondary education.
- 8) There were no statistically significant differences between the native and non-native students' liking of school subjects. The majority of both student samples like the subjects they are taking, and mainly like these subjects because of personal interest; mainly disliked some subjects because they were too difficult; and liked and disliked the same subjects. However, native students seemed more likely to prefer languages and math, while the non-native students preferred first math and then social studies, art, drama and physical education.
- 9) The majority of native students do not perceive the subjects they are taking as difficult. In fact, the native students are less likely than the non-native students to perceive the subjects they are taking as difficult.
- 10) The majority of native students perceive the subjects they are taking as useful, in order to find a job. This suggests that the native students perceive their subjects as useful in the applied rather than the academic sense, which is the same as the non-native students.

11) Two reasons seem to differentiate (though not statistically) the two student samples in terms of reasons for leaving school.

The native youth more often gave the following reasons:

- a) need to stay home and help, and
- b) too old for grade level

Therefore, the descriptive item analysis in Chapter VII suggests that the native students: i) have less favorable experiences with guidance counsellors, ii) seem to be equally well adjusted to school in general and also to informal interaction within the school milieu, iii) don't perceive their teachers as discriminative, iv) have shorter range educational goals, v) have lower educational expectations and goals, vi) don't perceive their subjects as more difficult, useless or irrelevant, as compared to the non-native students, and vii) seem to have slightly different circumstances that may prompt them to leave school.

In conclusion, the educational system seems to be meeting the educational goals and needs of the native and non-native students equally well. The native students may be at a disadvantage in some areas, and have slightly different interests (in terms of subjects) and shorter range goals, but also seem to be well adjusted to their interaction in separate segments of their school experience. A more extensive analysis of the native student adjustment to school is presented in Chapters X and XI.

CHAPTER VIII

THE EMPLOYMENT INFORMATION

This chapter will present a content analysis of the extent and type of native youth employment, and will focus on the following topics:

- 1) non-student employment
- 2) student employment
- 3) job satisfaction and chances for promotion
- 4) reasons for unemployment
- 5) student summer employment
- 6) summer unemployment
- 7) procedure of finding jobs in past
- 8) extent of difficulty finding employment

Where possible, the data for native youth will be compared to the data for non-native youth.

Non-Student Employment

This analysis deals with the 80 native youth transient respondents.

TABLE 8:1

Non-Student Employment

	Transient Native Youth	
	<u>N</u>	<u>%</u>
Part-time	10	12.5
Full-time	5	6.3
Unemployed	57	71.2
Non-response	8	10.0
TOTAL	80	100.0%

The data in Table 8:1 suggest that approximately three-quarters (71.2%) of the transient (non-student) youth are unemployed, and only a minimal percentage (6.3%) are full-time employed.

The mean number of hours per week that these 15 non-student native youth worked was 35.2 hours. The length of employment on the present job varied from two months to over ten years. The employment mobility was measured by the number of jobs the respondents have had in the past two years. Since the mean number of jobs is 5.1 for the 15 employed non-students, it is suggested that these native youth are at least moderately mobile in terms of employment. Only three out of the 15 (20%) native youth non-students had been fully employed for the past year.

The occupational structure of the native youth non-student respondents is presented below in Table 8:2.

TABLE 8:2

Occupational Structure of Native Youth

<u>Occupational Level</u>	Non-Students	
	<u>N</u>	<u>%</u>
Hollingshead 5	2	13.3
Hollingshead 6	1	6.7
Hollingshead 7	8	53.3
Non-response	4	26.7
	<hr/>	<hr/>
TOTAL	15	100.0%

The Hollingshead scale of socio-economic positions (see Appendix J) breaks up the major occupations into 7 scale points, point number 7 being the lowest position. Hollingshead 5 is defined as skilled manual employees, Hollingshead 6 is defined as machine operators and semi-skilled employees, and Hollingshead 7 is defined as unskilled employees. This suggests that the

majority (53.3%) of the native youth non-students are in the unskilled occupations.

The analysis in this section describes the native youth non-student as most likely to be unemployed. If he is employed he is more likely to be employed part-time, relatively mobile in terms of length of time at one job and most likely to be an unskilled employee.

Student Employment

This section deals with the 143 native youth respondents who stated that they were students; and the 190 non-native youth students. Ten out of 143 (7.0%) of the native youth students are working part-time, while a comparable 47 out of 190 (24.7%) of the non-native youth are employed part time. This suggests that the non-native students are more likely to be working than the native students. Since the N for the native youth is relatively small, (less than 40), the interpretations are limited and a test for significant differences was not as applicable.

The kinds of jobs that the two samples have are outlined in Table 8:3.

TABLE 8:3

<u>Job Type</u>	<u>Type of Student Job</u>			
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Babysitting	2	20.0	13	27.7
Delivery	1	10.0	9	19.1
Clerking	1	10.0	2	4.3
Construction, manual	4	40.0	10	21.3
Hospital	1	10.0	-	-
Other	-	-	9	19.1
Non-response	1	10.0	4	8.5
	<hr/>	<hr/>	<hr/>	<hr/>
TOTAL	10	100.0%	47	100.0%

The data in Table 8:3 suggest that the native youth were most likely to have construction (manual and farm) or babysitting jobs. The same is true for the non-native youth except in the opposite order, i.e. first babysitting and then construction and manual jobs. A larger percentage of the non-native youth than the native youth seem to get the delivery jobs.

The mean number and frequency distribution of hours per week worked are presented below in Table 8:4.

TABLE 8:4

Hours Per Week Worked

<u>Hours</u>	Native Youth		Non-Native Youth	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
0 - 4	2	20.0	9	19.1
5 - 8	1	10.0	12	25.5
9 - 12	-	-	7	14.9
(0 to 12 hours	3	30.0%	28	59.5%)
13 - 16	-	-	3	6.4
17 - 20	2	20.0	5	10.6
21 - 24	-	-	2	4.3
29+	2	20.0	2	4.3
Non-response	3	30.0	7	14.9
TOTAL	10	100.0%	47	100.0%
Mean # of Hours/Week	12.4		10.4	

The frequency distribution of hours per week worked in Table 8:4 seems to suggest a wide spread of hours for the respondents. The majority

(59.5%, N = 28) of the non-native students work 0 to 12 hours per week, while this is not so for the native youth students. The mean number of hours per week worked are different for the two samples, with the native youth on the average, working more hours per week.

TABLE 8:5

Time of Day Worked

<u>Time</u>	Native Youth		Non-Native Youth	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Mornings only	1	10.0	-	-
Afternoons	2	20.0	15	31.9
Afternoons and Weekends	1	10.0	5	10.6
Mornings and Afternoons	1	10.0	-	-
Evenings only	1	10.0	11	23.4
Days	-	-	2	4.3
Evenings and Days	-	-	6	12.8
Non-response	4	40.0	8	17.0
	<hr/>		<hr/>	
TOTAL	10	100.0%	47	100.0%

Again the working structure appears to be different for the two samples. However, the majority of both samples work afternoons only or evenings only (especially the non-native youth sample).

Job Satisfaction and Chances for Promotion

This section deals with both the student and non-student sub-samples of the native youth sample. The data re job satisfaction and chances for promotion are presented in Table 8:6 below.

TABLE 8:6

Job Satisfaction and Chances for Promotion*

<u>Response</u>	<u>Total</u>		<u>Native Youth</u>		<u>Student</u>		<u>Non-Native Youth</u>	
	<u>N¹</u>	<u>%</u>	<u>N²</u>	<u>%</u>	<u>N³</u>	<u>%</u>	<u>N⁴</u>	<u>%</u>
Likes present job	20	80.0	13	86.7	7	70.0	35	74.5
Perception of high to average chances for promotion	12	48.0	7	46.7	5	50.0	17	36.2
Perception of high to average chances for better job	17	68.0	13	86.7	4	40.0	25	53.2
Perception of high to average chances for losing job	14	56.0	8	53.3	6	60.0	10	21.3
Desire for better job	23	92.0	15	100.0	8	80.0	31	66.0

* Non-cumulative percentages are presented in this table

¹ Total N = 25

² Total N = 15

³ Total N = 10

⁴ Total N = 47

The data in Table 8:6 suggest that the vast majority of all samples like their present jobs, but also desire a better job. The perception of high to average chances for promotion are lowest for the non-native youth (36.2%). Also, the perception of high to average changes for losing their job is markedly lowest for the non-native youth (21.3%). However, the perceptions of high to average chances for getting a better job, and desiring a better job, are higher for the native non-student sub-sample.

The largest differences between the two school samples are in terms of perception of high to average chances for losing job, with the native students as higher; and desiring a better job, also with the native students higher.

This analysis seems to suggest that the non-native youth have more security in their present jobs than the native student youth. However, the native and non-native student youth seem to equal in their job satisfaction. The results are inconclusive in terms of perceived chances for promotion and perceived chances for a better job. A higher percentage (50.0% versus 36.2%) of native youth than non-native youth perceive that they have a good chance for promotion; while a higher percentage (53.2% versus 40.0%) of non-native youth than native youth perceive that they have a good chance for a better job. These differences may be explained in that the native youth are more likely to hope to get a promotion within a certain job structure; while the non-native youth are more likely to perceive themselves as getting a better job, rather than getting a promotion within the same job type.

Reasons for Unemployment

Since 71.2% (N=66) of the native non-students, 93.0% (N=133) of the native students, and 75.3% (N=143) of the non-native students are unemployed; it becomes very relevant to ask why these youth are unemployed. The data on the reasons for unemployment is presented in Table 8:7 below.

TABLE 8:7

Reasons for Unemployment*

<u>Reasons</u>	<u>Total</u>		<u>Native Youth</u>		<u>Student</u>		<u>Non-Native</u>	
	<u>N¹</u>	<u>%</u>	<u>N²</u>	<u>%</u>	<u>N³</u>	<u>%</u>	<u>N⁴</u>	<u>%</u>
Can't find job	69	34.7	43	65.2	26	19.5	43	30.1
Attending school	64	32.2	3	4.5	61	45.9	11	7.7
Lack of education, training or skill	57	28.6	40	60.6	17	12.8	10	7.0
Too young	53	26.6	9	13.6	44	33.1	76	53.1
No transportation	34	17.1	24	36.4	10	7.5	7	4.9
Discrimination and prejudice	34	17.1	24	36.4	10	7.5	1	.7
Don't want avail- able jobs	27	13.6	14	21.2	13	9.8	12	8.4
Stay home to help	21	10.6	8	12.1	13	9.8	19	13.3
No need or want to	5	2.5	3	4.5	2	1.5	6	4.2
Work not available	4	2.0	1	3.0	3	2.3	3	2.1
Married no need to	2	1.0	2	3.0	-	-	-	-
Other	24	12.1	16	24.2	8	6.0	4	2.8

* percentages are non-cumulative

¹ Total N = 199

² Total N = 66

³ Total N = 133

⁴ Total N = 143

P < .05

Four of the major reasons why native youth are unemployed are:

i) they can't find a job, ii) they are attending school, iii) they lack education, training or skill, and iv) they are too young. These are also the major reasons given by the native youth students, except with "attending school" and "too young" as the prime reasons.

In comparison the three major reasons why non-native youth are unemployed are: i) too young, ii) can't find a job, and iii) have to stay home to help. This suggests that some of the major reasons for unemployment are the same for both native and non-native samples. The non-native youth do not give the lack of education, training or skill reason as frequently as the native youth. Also, another important distinction between the native and non-native youth samples is that discrimination and prejudice is given as a reason for unemployment by 36.4% (N=24) of the native non-students and 7.5% (N=10) of the native students, as compared to only .7% (N=1) of the non-native youth.

This analysis suggests that the major reasons for unemployment are the same for all samples, i.e. some of the respondents were too young to work and some of the respondents couldn't find jobs. The distinguishing points seemed to be that more of the non-native youth had to stay home and help, and many more of the native youth gave "attending school" as a reason for unemployment ($P < .05$).

Student Summer Employment

Thirty-one out of the 143 (21.7%) native students were employed last summer, and 64 out of 190 (33.1%) of the non-native students were employed last summer. This suggests that the summer employment was noticeably greater for the non-native as compared to the native students.

Table 8:8 below presents the types of jobs the respondents had during the summer.

TABLE 8:8

Type of Summer Job for Students

<u>Type of Job</u>	<u>Native Youth</u>		<u>Non-Native Youth</u>	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Laboring	11	35.5	20	31.2
Babysitting	8	25.8	9	14.1
Clerical	4	12.9	-	-
Delivery	3	9.7	17	26.6
Clerking, sales	2	6.5	5	7.8
Other jobs	3	9.7	7	10.9
Non-response	0	0.0	6	9.4
TOTAL	31	100.1%	64	100.0%

P > .05

The data in Table 8:8 suggest that the two most common jobs that native youth students have had during the summer are laboring and babysitting jobs. The most common jobs held by non-native youth are laboring too, but also delivery jobs. The major difference between the types of jobs the two samples had in the summer is in the fact that native youth were more likely to have had babysitting and clerical jobs than the non-native youth, whereas the non-native youth were more likely than the native youth to have had delivery jobs. However, these differences are not statistically significant.

The mean number of hours worked per week by the native youth during their summer employment was 29.4 hours, as compared with 18.3 hours for the non-native youth. Table 8:9 presents the data on hours worked per week during the summer for both samples.

TABLE 8:9

Hours/Week Worked During Summer

<u>Hours/Week</u>	Native Youth		Non-Native Youth	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
0 - 8	4	12.9	28	43.8
9 - 16	3	9.7	3	4.7
17 - 24	1	3.2	7	10.9
25 - 32	1	3.2	2	3.1
33 - 40	14	45.2	11	17.2
41 +	4	12.9	7	10.9
Non-response	4	12.9	6	9.4
TOTAL	31	100.0%	64	100.0%
33+ hours/week	58.1%		28.1%	
Mean =	29.4 hours/ week		18.3 hours/week	

P < .05

The data in Table 8:9 suggest that the majority (58.1% of native youth worked 33+ hours per week. However, a close majority (43.8%) of non-native youth worked 8 or less hours a week. Therefore, even though a lower percentage of native youth worked during the summer, they worked more during a week than the comparative non-native youth ($P < .05$).

Table 8:10 presents data on the length of the respondents' summer job.

TABLE 8:10

Length of Summer Job

<u>Number of Months</u>	Native Youth		Non-Native Youth	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Less than 1	4	12.9	1	1.6
1 to 1½	6	19.4	15	23.4
Less than 2	2	6.5	-	-
2 to 2½	13	41.9	25	39.1
3 to 4	3	9.7	1	1.6
4 plus	3	9.7	17	26.6
Non-response	0	0	5	7.8
	<hr/>		<hr/>	
TOTAL	31	100.1%	64	100.1%

P > .05

The data from Table 8:10 suggest that the largest group (41.9%, N=13) of native students worked 2 to 2½ months which is comparable to the 39.1% (N=25) of non-native students who also worked 2 to 2½ months. The major differences in the number of months the two samples worked is that a larger percentage of the native youth as compared to the non-native youth, worked less than 1 month; and a larger percentage of non-native students worked 4 and more months during the summer. However, these differences are not statistically significant.

This analysis suggests that there are noticeable differences (though not statistically significant) in the types of jobs the native youth have during the summer, with the non-native youth getting more delivery jobs and the native youth getting more babysitting and clerical jobs. The native youth also tended to work more hours per week but for a shorter part of the summer. This may be partly due to the relatively older age of the native youth.

Summer Unemployment

Since 78.3% (N=112) of the native students and 66.3% (N=126) of the non-native students were unemployed during the summer, it is interesting to note what these unemployed did.

TABLE 8:11

Summer Activities (Unemployment)

<u>Activities</u>	Native Youth		Non-Native Youth	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Did nothing	20	17.9	15	11.9
Travelled	9	8.0	26	20.6
Helped family or friends	8	7.1	7	5.6
Camped	3	2.7	4	3.2
Left city	2	1.8	3	2.4
Community activities	1	.9	3	2.4
Other activities	4	3.6	4	3.2
Non-response	65	58.0	64	50.7
TOTAL	112	100.0%	126	100.0%

P > .05

Since the non-response rate is relatively high (over-half of the applicable responses) the interpretation of the results for this item are correspondingly restricted. However, the data in Table 8:11 suggest that most of the unemployed native youth who answered this item did nothing (17.9%, N=20) during the summer, as compared to most of the non-native youth who travelled (20.6%, N=26). This may suggest that unemployed non-native youth have more opportunity than native youth students to travel during the summer months (difference is not statistically significant).

Procedure for Finding Jobs in the Past

Table 8:12 presents a frequency distribution of the various ways the native youth and non-native youth have found jobs in the past. The total samples are looked at since the number who have ever been employed for each sample is not known.

TABLE 8:12

Procedure for Finding Past Jobs*

<u>Procedure</u>	Native Youth				Non-Native Youth			
	Total <u>N¹</u> %		Non-Students <u>N²</u> %		Students <u>N³</u> %		<u>N⁴</u> %	
Through friends	91	40.6	51	63.0	40	42.0	53	27.9
Through looking around	90	40.2	62	76.5	28	19.6	44	23.2
Want Ads in paper	75	33.5	45	55.6	30	21.0	20	10.5
Through agency	66	29.5	52	64.2	14	9.8	9	4.7
Through School Counsellors	16	7.1	3	3.7	13	9.1	4	2.1

* Non-cumulative frequencies are presented here

¹ Total N = 224

² Total N = 81

³ Total N = 143

⁴ Total N = 190

P < .05

The data in Table 8:12 suggest that the two most common procedures that the native youth have used to find jobs have been: i) through friends (40.6%, N=91), and ii) through looking around (40.2%, N=90). This is also true for the sub-sample of native non-students, however, a large percentage found jobs through agencies (64.2%, N=52) and through want ads in the paper (55.6%, N=45). A number of native students (21.0%, N=30) have also found jobs through want ads in the paper. The largest percentage of native students (42.0%, N=40) have found jobs mainly through their friends (27.9%, N=53) and through looking around (23.2%, N=44).

This analysis suggests that the procedure for findings jobs is mainly the same for native and non-native students, the main difference being that a larger percentage of native students than non-native students have found jobs through friends and want ads in the paper ($P < .05$). The native non-students were the only sub-sample in which a large percentage (64.2%, $N=52$) had found jobs through agency contact. This suggests that both school samples tend to rely on more informal means of obtaining part time jobs, than the formal approach to an agency that is more likely used in combination with the other procedures by the native non-students who are also more likely in search of full-time permanent jobs.

Extent of Difficulty in Finding Employment

This item deals with all the samples and attempts to measure the extent of the need for employment, and how easily this need is being met. Table 8:13 below presents the percentage of each sample and sub-sample that have had trouble finding employment.

TABLE 8:13

Trouble Finding Employment

<u>RESPONSE</u>	<u>Total Sample</u>		<u>Native Youth</u>				<u>Non-Native Youth</u>	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>Student</u>		<u>N</u>	<u>%</u>
Yes	102	45.5	57	70.4	45	31.5	44	23.2
No	72	32.1	12	14.8	60	42.0	81	42.6
Non-response	50	32.4	12	14.8	38	26.5	65	34.2
TOTAL	224	100.0%	81	100.0%	143	100.0%	190	100.0%

The data in Table 8:13 suggest that the majority (70.4%) of the native transients have difficulty finding employment. The percentage of native transients having difficulty finding employment is greater than the native students ($P < .05$). This may be explained by the fact that many of the native students (and also non-native students) are not looking for jobs, probably because they are too young or are full-time students. The difference in the proportions of those having and not having difficulty in finding employment between the two student samples is not statistically significant ($P =$ not significant), though slightly higher for the native students.

This analysis suggests that the majority of the young adult native transients have trouble finding employment, and therefore see their employment needs as not being met. Approximately 1/3 of the native students and 1/4 of the non-native students also have trouble finding employment but this difference is not statistically significant. Therefore, it is concluded that the non-native students are just as likely as the native students not to have their employment need realized.

SUMMARY

The above analysis suggested that the transients (non-students) are most likely to be unemployed. If a native transient is employed, he is most likely to be employed part-time, at least relatively mobile in terms of length of time at a job, and an unskilled employee.

The non-native students are more likely to be working than the native students. Both the native and non-native students are most likely to have construction (manual and farm), or babysitting jobs. The native students work on the average, more hours per week than the non-native students. Also, the majority of both student samples work afternoons or evenings only.

The vast majority of all four samples (native, non-native, student and transient) like their present jobs but also desire a better job. The analysis seems to suggest that the non-native youth have more security in their present jobs than the native youth. Also, the native youth seem to be more likely to hope to get a promotion within a certain job structure; while the non-native youth are more likely to perceive themselves as getting a better job (rather than a promotion).

Some of the major reasons for unemployment are the same for both native and non-native student samples; for example: i) too young, ii) can't find a job, and iii) attending school. The distinguishing reasons for unemployment between the two student samples were that more of the non-native youth had "to stay home and help" and comparatively more native youth gave "attending school" as a reason for unemployment.

Summer employment was noticeably greater for the non-native as compared to the native students. There were noticeable (though not statistically significant) differences in the types of jobs the two samples had during the summer, with the non-native youth more likely having delivery jobs and the native youth more likely having babysitting and clerical jobs. The native youth also tended to work more hours per week, but for shorter periods. Some of these differences may be partly due to the relatively older age of the native youth sample as compared to the non-natives.

Most of the unemployed native youth did "nothing" during the summer, as compared to most of the non-native youth who travelled (this finding is restricted by a high non-response rate).

The procedure for finding jobs is mainly the same for native and non-native students, however, a larger percentage of native students as compared to non-natives have found jobs through friends and want ads in the paper. Both school samples tend to rely on more informal means of obtaining part-time jobs rather than approaching an agency. Native non-students are more likely to approach agencies because they are also more likely to be searching for full-time permanent jobs.

The majority of the native transients have trouble finding employment and therefore, view their employment need as not being met. Also, the non-native students seem just as unlikely as the native students to have their employment needs realized. One-quarter to one-third of the non-native and native students stated that they have trouble finding employment. Many of the others are not looking for employment because they are too young, are full-time students, or have no need to work.

CHAPTER IX

THE SOCIAL INFORMATION AND GENERAL SOCIAL SUMMARY FACTORS

This chapter isolates general proto-type factors for the transient and student native samples, and then compares the factor structures of the native and non-native student samples. A component analysis of the combined student samples was also carried out, which defined the variables used in the hypotheses tested in Chapters X and XI.

A principal component analysis (with orthogonal varimax rotation) computer program was run on the separate sub-sample responses.¹ An oblique rotation (Promax) was also attempted on this data but the results did not add clarity or simplicity to the original orthogonal solution.² The original variables correlated for the component analysis of the native student, non-native student and total student samples are presented in Appendix P.

Therefore, the isolated factors, orthogonally rotated, define the characteristics of the native transient, native student, non-native youth, and total student samples.

Also, a brief discussion of the perceived personal needs will be presented for both the native and non-native youth total samples.

The Transient Native Youth Factors

The following table (Table 9:1) presents the factors and related variables isolated as possibly related to discrimination for the native transient youth. The original correlation matrix is in Appendix K. The factors were chosen by setting the eigenvalue at 1.000 or greater. Variables with factor loadings over .300 were included as contributing variables.

1 Division of Educational Research Services, FACT01

2 The oblique rotation was attempted to isolate possibly related factors. The oblique factors obtained were minimally correlated, which suggests that the majority of the factors isolated by the principal component analysis are independent of each other.

TABLE 9:1

Proto-Type Factors Isolated Re Native Transient Youth*

	<u>Factor 1</u>	<u>Factor 2</u>	<u>Factor 3</u>	<u>Factor 4</u>
	<u>General Social Discrimination</u>	<u>Trouble With Public Help Services</u>	<u>Personal Avoidance</u>	<u>Trouble With Service In Bars (under age)</u>
<u>ables</u>				
Edmontonians avoidance			0.993	
Trouble finding housing	0.463	0.735		-.424
Trouble finding employment	-0.168	0.944		.117
Hassled in street	1.006	0.165		.143
Hassled by men	0.967		0.191	.152
Hassled by people	0.907		0.176	.198
Trouble with service in bars	.123			.937
Trouble with welfare	0.456	0.875		
Trouble with service in bus depot	0.687	0.487	0.119	

* The empty columns specify correlations of .100 or less.

Table 9:1 suggests that the intercorrelations between nine variables may be explained by four factors. These factors are defined as:

Factor I - General social discrimination

Factor II - Trouble with public help services

Factor III - Personal avoidance

Factor IV - Trouble with service in bars

Factor I contains the following variables in decreasing order of loading of scores:

a) Hassled in street, b) hassled by men, c) hassled by people,

d) trouble with service in bus depot, e) trouble finding housing, and f) trouble with welfare. Factor I seems to define general social discrimination, especially in public places.

Factor II seems to define trouble with public help services, and contains the following variables in decreasing order of loading scores:

a) trouble finding employment, b) trouble with welfare, c) trouble finding housing, and d) trouble with service in the bus depot.

Factor III can be defined as personal avoidance, containing the following variables in decreasing order of loading scores:

a) Edmontonians avoid you, and b) trouble finding housing.

Factor IV loads mainly on two variables:

a) trouble with service in bars, and b) trouble finding housing.

This suggests that Factor IV may be defining a factor which is highly related to age or some other undefined variable. Since the factor loading for "trouble finding housing" is negative, Factor IV defines people who don't have trouble finding housing, but who have trouble with service in bars (which may be because they are too young to be served in bars).

Therefore, the factor analysis on the nine variables related to native transient discrimination has isolated four specific types of discrimination:

- 1) general social discrimination,
- 2) discrimination in terms of help from public services,
- 3) discrimination in personal interactions,
- and, 4) discrimination in bars.

The Native Student Factors

Seventy-nine variables theoretically and a priorially related to adjustment, general personality, integration, discrimination, alienation, assimilation, self-identity, etc. were component analyzed to yield twelve distinct and unrelated orthogonal, proto-type factors. These factors were chosen by selecting all eigenvalues of 1.000 or greater. The original variable correlation matrix is presented in Appendix L.

From these twelve factors the first eight were selected (explaining 92.4% of the total variance). Only variables with factor loadings over .400 were included as the major contributing variables.

The labels of each factor are only significant as an attempt to conceptually link the factorially related variables to the proto-type factor structure.

Factor I - General Adjustment to School

Factor I is a very general factor containing twenty-five variables with factor loadings of .401 or more. The larger loadings define the perception of place of self and others in the school milieu. Therefore, it is suggested that this group of variables define a general adjustment factor labelled as "general adjustment to school".

Factor II - General Personality

Another twenty-three variables with factor loadings of .403 or more were isolated for Factor II. This factor defined an area of general personality and loaded most highly (factor loadings of .800 or greater) on:

i) feeling of need to be alone, ii) acceptance of self, iii) acceptance of life as a series of problems, iv) liking of some basic goals in life,

and v) perception of conformity.

Factor III - General Integration

Seventeen more variables with factor loadings of .425 or more were isolated in Factor III. The following variables had factor loadings of .736 and higher, and therefore define Factor III.

- i) trouble with service in stores,
- ii) participation in community leagues ,
- iii) trouble with service from welfare, and
- iv) trouble with service in bus depot.

Factor IV - General Discrimination or Disadvantage

Factor IV is another general factor with factor loadings of .400 or greater for 18 variables. The following variables had factor loadings of .662 or greater:

- 1) perception of agencies catering to needs (.786)
- 2) trouble finding employment (.714)
- 3) desire to keep traditional way of life (.705)
- 4) perception of inadequate variety of services offered by agencies (.700)
- 5) hassled by people (.682)
- 6) trouble finding housing (.680)
- 7) perception of general inadequacy of agencies (.676)
- 8) perception of inadequate number of agencies (.662)

This factor seems to define the area of perceptions of being disadvantaged, underprivileged, dissatisfied, and discriminated against.

The four general factors outlined above explain approximately two-thirds of the variance of the native student responses. The remaining four factors help define these general characteristics of the native youth

students more specifically.

Factor V - General Life Outlook and Adjustment

The following six variables define factor V, in decreasing factor loadings:

- 1) Liking of Edmontonians (.825)
- 2) Perception of Edmontonians as friendly (.825)
- 3) Perception of Edmontonians as unfriendly (.689)
- 4) Edmontonians try to help individual (.607)
- 5) perceived avoidance of Edmontonians (.532)
- 6) Edmontonians try to understand individual (.509)

These six variables suggest a general adjustment or outlook factor.

Factor VI - Adjustment to Interpersonal Interaction in School

Another five variables clarify the general adjustment factor as separate from the specific adjustment to informal interaction in the school milieu. These five variables are presented below in decreasing factor loadings:

- 1) perceived trouble making friends (.723)
- 2) liking of other students (.695)
- 3) perception of other students liking self (.661)
- 4) perception of teachers liking self (.658)
- 5) possession of non-native friends (.632)

Factor VII - Conformity to Conventional Norms

The six variables listed below suggest a conformity to conventional norms and values factor. The variables are listed in order of decreasing factor loadings:

- 1) Perceived friendliness of police (.641)
- 2) Go to police for help (.618)
- 3) Confidence in police (.577)
- 4) Part-time employment (.573)
- 5) Where to go for advice (.512)
- 6) Desire to integrate into Edmonton way of life (.466)

Factor VIII - Closeness of Relationship with Family

The following four variables define whether the respondents would go for help to their families or somewhere else. The variables are listed in order of decreasing factor loadings.

- 1) where individual goes when he has emotional troubles (.740)
- 2) where individual goes when lonely (.705)
- 3) where individual goes when in trouble (.600)
- 4) where individual goes when frustrated (.582)

Therefore, the factor analysis of the native student responses to seventy-nine variables, clearly isolated eight independent factors. These factors are related to the general personality, integration, adjustment, discrimination, assimilation, conformity, and closeness of relationship conceptual areas. These factors were defined as:

- 1) general adjustment to school
- 2) general personality
- 3) general integration
- 4) general discrimination and disadvantage
- 5) general life outlook and adjustment
- 6) adjustment to interpersonal interaction in school
- 7) conformity to conventional norms and values, and
- 8) closeness of relationship with family

The Non-Native Youth Factors

Seventy-seven variables theoretically and a priorially related to the same conceptual areas as defined for the native youth sample were factor analyzed. The original variable correlation matrix is in Appendix M. Twenty-seven factors with eigenvalues greater than 1.000 were isolated. The first thirteen of the factors were selected as relevant proto-type factors using the Scree Test method of plotting the eigenvalues and selecting a point where the eigenvalues showed a pronounced drop in size. These thirteen factors still included the majority of the variance (59.8%). Factors 14 to 27 presented a continuum of decreasing eigenvalues with no numerically suggestive cutting point. Again, only variables with factor loadings over .400 were included as the major contributing variables. The labels for each factor have conceptual significance only so far as they add clarity to the proto-type factor structure.

Factor I - Perception of Adequacy of Agency Resources

Four distinct variables describe Factor I as the Perception of Agency Resources' Adequacy:

- 1) perception of general inadequacy of agency resources (.858)
- 2) perception of agencies catering to needs (.844)
- 3) perception of inadequate number of agencies (.828)
- 4) perception of inadequate variety of agencies (.828)

This factor is statistically pure with no other factors loading on it and was not found in the native student analysis.

Factor II - Relationship with Teacher

The following five variables define a very specific factor, the respondents' perception of his relationship with his teachers.

- 1) perception of teacher helpfulness (.784)
- 2) like teachers (.783)
- 3) general perception of teachers (.577)
- 4) perception of teachers liking self (.519)
- 5) desire to achieve recognition (.409)

This factor does not have another factor loading on it, and therefore is not statistically complex. Also, this factor is peculiar to the non-native student sample.

Factor III - General Life Outlook and Adjustment

The four variables that describe this factor are listed below:

- 1) Edmontonians try to help you (.763)
- 2) Edmontonians do things with you (.690)
- 3) Edmontonians perceived as friendly (.567)
- 4) Edmontonians try to understand you (.540)

This factor (Factor III) was also isolated for the native youth student sample, and this suggests that both of the student samples' characteristics can be explained in this factorial dimension.

Factor IV - Trouble with help from Public Services (Discrimination)

The four variables that load on this factor are:

- 1) trouble with service in bars (.696)
- 2) trouble with service from welfare (.689)
- 3) trouble finding housing (.598)
- 4) trouble finding employment (.584)

This factor was also isolated for the native transient and student responses where it was suggested that this factor may be isolating feelings of being discriminated against.

However, this discrimination factor is different from the similar factor isolated for the native students, in that the non-native discrimination factor applies specifically to public service whereas the native student discrimination factor applies to a more general perception of being disadvantaged, dissatisfied, underprivileged and discriminated against. This may suggest that the native youth tend to feel discriminated against by most of white society (which includes help from public services), whereas the non-natives tend to see discrimination more specifically in terms of adequacy of service and help from public sources (including bars, welfare, landlords, etc.).

Factor V - Personal Discrimination - Persecution

The two variables that define Factor V are:

- 1) hassled by men (.888)
- 2) hassled by people (.877)

These variables suggest a perception of persecution or trouble from the people around them, which is a type of discrimination. The variables that define this specific type of non-native discrimination, were included in "general discrimination or disadvantage" factor of the native student analysis.

Factor V suggests that the more specific non-native discrimination factor is peculiar to the non-native sample, whereas the native students perceive this type of discrimination as a part of a total discrimination operative in white society.

Factor VI - Employment Discrimination

The three variables that define Factor VI are:

- 1) liking of present job (.825)
- 2) part-time employment (.783)
- 3) perception of employment discrimination (.636)

These variables define another specific type of discrimination that is not included in the native student general discrimination factor. This suggests that this factor may be specific to the non-native youth sample and not to the native sample.

Factor VII - Adjustment to Interpersonal Interaction in School

The three variables that define Factor VII:

- 1) perception of other students liking self (.776)
- 2) perceived trouble making friends (.599)
- 3) liking of other students (.555)

This adjustment factor is almost identical to the adjustment factor (Factor VI) isolated for the native sample. Therefore this factor dimension is common to both native and non-native students.

Factor VIII - Trouble with Service in Public Places

Two variables define this specific discrimination factor (Factor VIII):

- 1) trouble with service in stores (.785)
- 2) trouble with service in bus depot (.771)

This factor is a specific factor that defines trouble with service in public places. The variables in this factor were included in the "General Integration" factor (Factor III) for the native students. Therefore, once again the factor of general integration applies to the native students and is defined in terms of their integration into white society whereas the non-native youth problem of service in public places is specifically related to individuals and their social milieu.

Factor IX - Liking of School Subjects

Two variables define this factor:

- 1) Why likes subjects (-.713)
- 2) Liking of subjects taking (.712)

These two variables are included in the "General School Adjustment" factor for the native student sample. Here again, this specific factor (Factor IX) is found for the non-natives which is included in a general native student factor.

Factor X - Confidence or Closeness of Relationship

The four variables that define this factor are listed below:

- 1) where individual goes when has emotional troubles (.722)
- 2) perceived friendliness of police (.609)
- 3) where individual goes when broke (.454)
- 4) where individual goes when in trouble (.443)

These four variables suggest both the confidence and closeness of relationship conceptual frames. Factor X is almost identical to the closeness of relationship with family factor defined for the native student sample.

Factor XI - Perceived Difficulty of School Subjects

Factor XI contains two variables:

- 1) Perception of subjects' difficulty (.735)
- 2) Educational goals and needs - why grade level is sufficient (.469)

These variables suggest a perceived difficulty of school factor which encompasses educational goals and needs. Factor XI seems to be defining the dimension of perceived difficulty of school subjects. This

factor was not isolated for the native student sample.

Factor XII - Assimilation

This factor is defined by two variables:

- 1) desire to practice traditions (.788)
- 2) prefer to keep traditional way of life (.771)

These variables suggest an assimilation factor for the non-native sample.

A similar factor structure was not isolated for the native student sample.

Factor XIII - Personal Alienation

Four variables define this factor:

- 1) where individual goes for emotional troubles (.693)
- 2) Perceive Edmontonians as unfriendly (.501)
- 3) Perception of differences between means and ends (.424)
- 4) Like Edmontonians (-.410)

The factor of personal alienation is defined by these variables. Again this specific factor was found for the native student sample.

Comparison of Native and Non-Native Student Factor Structures

This section presents a descriptive comparison of the two student factor structures, in an attempt to isolate peculiar factor dimensions and proto-type factors for each sample.

The table below (Table 9:2) presents the orthogonal Factor I for the native students (which is a general adjustment to school factor), and relates this factor to two more specific adjustment factors isolated for the non-native sample, Factor IX (liking of school subjects) and Factor II (relationship with teacher).

TABLE 9:2

Comparison of Native Student Factor I With the Non-Native Factor Structure

<u>Variables</u>	Native Student Factor I General Adjustment to School	Non-Native Student	
		Factor IX Liking of School Subjects	Factor II Relationship With Teacher
Perception of Place in School	.909		
Perception of Guidance Counsellors	.864		
Perception of Subjects' Usefulness	.864		
Why Likes Subjects	.860	-.713	
Perception of Administration	.831		
Perception of Teachers	.829		.577
Perception of Students	.799		
Perception of Happiness	.769		
Likes Subjects Taking	.757	.712	
Humiliating Examples by Teachers	.696		
Perception of Teacher Helpfulness	(.339)		.784
Like Teachers	(.220)		.783
Perception of Teachers Liking Self	(.405)		.519
Desire to Achieve Recognition	(-.516)		.409

It can be seen from Table 9:2 that there is a minimal overlap between the general adjustment to school factor for the native students and the specific adjustment factors for the non-native students. This would suggest that the general adjustment factor is not present for the non-native students, and the non-native specific adjustment factors are not present for the native students. However, it can be seen that the adjustment factor structures for the two samples are related.

Table 9:3 presents the comparison between the native student Factor IV (General discrimination or disadvantage) and four specific non-native factors (perception of adequacy of agency resources, trouble with help from public services, personal discrimination, and assimilation.)

TABLE 9:3

Comparison of Native Student Factor IV With The
Non-Native Factor Structure

Variables	<u>Native Students</u>		<u>Non-Native Students</u>		
	Factor IV General Discrimination or Disadvantage	Factor I Perception of adequacy of agency resources	Factor IV Trouble with Help from Public Services	Factor V Personal Discrim- ination	Factor XII Desire to Assimi- late
Perception of agencies catering to needs	.786	.844			
Trouble finding employment	-.714		.584		
Prefer to keep traditional way of life	.705				.771
Perception of inadequate variety of services offered by agencies	.700	.828			
Hassled by people	.682			.877	
Trouble finding housing	.680		.598		
Agencies perceived as generally inadequate	.676	.858			
Perception of inadequate number of agencies	.662	.828			
Liking of present job	-.615				
Hassled by Men	.610			.888	
Speak Native Tongue	-.588				
Hassled in Street	.586				
Trouble with Service in Bars	.482		.696		
Trouble with Service from Welfare	(.125)		.689		
Desire to Practice Traditions	(.067)				.788

The data in Table 9:3 suggest that four specific non-native factors are related to the general native student factor of "general discrimination or disadvantage". This would suggest that the native student perception of being disadvantaged or discriminated against, implies their major reaction to the white social milieu and the general societal system, whereas the non-native youth do not have a comparable general reaction. The non-native perceptions of adequacy of agency resources, adequacy of help from public services, personal discrimination, and the desire to assimilate are not necessarily related (as they are for the native students). This may be explained in part by the greater individual differences of the non-native sample (who are of unknown ethnic origin but definitely non-native) and the specific non-native reaction to segments of society, rather than the more general feelings of native students about white society.

Table 9:4 presents the relationship between the native student Factor V (General life outlook and adjustment) and the similar non-native Factor II (General life outlook and adjustment); and a related factor, Factor XIII (personal alienation).

TABLE 9:4

Comparison of Native Student Factor V With Non-Native
Factor Structure

<u>Variables</u>	<u>Native Students</u>	<u>Non-Native Students</u>	
	Factor V General Life Outlook and Adjustment	Factor III General Life Out- look and Adjust- ment	Factor XIII Personal Alienation
Liking of Edmontonians	.825	(.094)	-.410
Perception of Edmontonians as friendly	.825	.567	
Perception of Edmontonians as unfriendly	-.689	(-.301)	.501
Edmontonian try to Help Individual	.607	.763	
Perceived Avoidance of Edmontonians	-.532	(-.280)	
Edmontonians Try to Under- Stand Individual	.509	.540	
Edmontonians Do Things With You	.364	.690	
Where individual Goes For Emotional Troubles	(.177)		.693
Perception of Difference Between Means & Ends	(.040)		.424

It can be seen from Table 9:4 that the factor structure of the student samples are similar on the "general life outlook and adjustment" dimension. Also, an additional factor was isolated for the non-native, Factor XIII, which seems to be measuring personal alienation. This would suggest that the factor of personal alienation (or integration) is not included in the general life outlook factor for the non-natives, whereas it is included for the native students.

The table below (Table 9:5) presents a comparison of the same factor structures (adjustment to interpersonal interaction in school) for the two student samples.

TABLE 9:5
Structures for Adjustment to Interpersonal Interaction
in School Factor Dimension

<u>Variables</u>	<u>Native Student</u> <u>Factor VI</u>	<u>Non-Native Student</u> <u>Factor VII</u>
Perceived trouble making friends	-.723	-.599
Liking of Other Students	.695	.555
Perception of Other Students Liking Self	.661	.776
Perception of Teachers Liking Self	.658	(.253)
Possession of (Non-Native) Friends	.632	(.268)

It can be seen from the data presented in Table 9:5 that a very similar factor structure exists for the two student samples in terms of adjustment to interpersonal interaction in school. The loadings for the non-native students on the variables "perception of teachers liking 'self'" and "possession of (non-native) friends" are lower than the loadings for the native students. This suggests that even on this common factor structure, the composition of the contributing variables varies between the two samples.

Table 9:6 below presents the comparative factor loadings on the "confidence or closeness of relationship" factor structure for the two student samples, and an overlapping native student factor of the "conformity to conventional norms".

TABLE 9:6

Comparative Factor Structure for Confidence or Closeness of Relationship Factor Dimension

<u>Variables</u>	<u>Native Students</u>	<u>Non-Native Students</u>	<u>Native Students</u>
	Factor VIII	Factor X	Conformity to Conventional Norms Factor VII
Where individual goes when has emotional troubles	.740	(.058)	
Where individual goes when lonely	.705	.722	
Where individual goes when in trouble	.600	.443	
Where individual goes when frustrated	.582	(.140)	
Where individual goes when broke	.356	.454	
Perceived friendliness of Police		.609	.641
Go to Police for help			.618
Confidence in Police			.577
Part-time employment			.573
Where go for advice			.512
Desire to integrate into Edmonton way of life			.466

The data in Table 9:6 suggest that there is a close correspondence between the "closeness of relationship" factor structures for the two student samples.

However, the non-native students do not load highly on the variables "where individual goes when has emotional troubles" and "where individual goes when frustrated", whereas the native students do load highly on these items. This suggests that these aspects (help for emotional troubles and when frustrated) of the closeness of relationship structure are not present for the non-native sample.

The "conformity to conventional norms" factor that was isolated for the native students was not found for the non-natives. However, one variable within this factor dimension was present in the Confidence or Closeness of Relationship factor (Factor X) for the non-natives. This finding defines a major difference in the factor structures of the two samples.

Table 9:7 presents a comparison of the native student general integration factor (Factor III) with a similar but more specific factor for the non-natives, Factor VIII - "trouble with service in public places"; and two, slightly related, non-native factors (assimilation, and trouble with help from public services).

TABLE 9:7

Comparison of Native Student General Integration Factor With The
Non-Native Factor Structure

<u>Variables</u>	<u>Native Student</u>	<u>Non-Native Student</u>		
	Factor III General Integration	Factor VIII Trouble With Ser- vice in Public Places	Factor XII Assimilation	Factor IV Trouble With Help from Public Services
Participation in Community Leagues	.795	(.065)	(-.125)	(-.120)
Trouble with Service in Bus Depot	.787	.771	(-.012)	(.180)
Trouble with Service from Welfare	.753	(.298)	(-.023)	.689
Trouble with Service in Stores	.736	.785	(-.050)	(.146)
Desire to keep traditional Way of Life	.681	(.108)	.771	(-.027)
Prefer to live in Edmonton Like Others	.628	(-.030)	(.162)	(.051)
Edmontonians do things With You	.695	(-.145)	(-.010)	(.139)
Perceived Avoidance of Edmontonians	.676	(.131)	(.020)	(.073)
Prefer to Live in City versus Reserve	.584	---	---	---
Edmontonians Try to Help You	.583	(-.064)	(.001)	(-.104)

The data in Table 9:7 suggest that the native student general integration factor is not clearly represented in the non-native factor structure. Three orthogonal non-native factors pick up segments of the native general integration factor, and these non-native factors are conceptually related to each other, and to the general native student factor. This suggests that the native students perceive their integration into white

society as a total process, whereas the non-native sample loads differently on the factors of trouble with service in public places, trouble with help from public services, and assimilation into general society.

The following factors were found to be peculiar to the non-native sample, and totally unrelated to the native student factor structure:

- 1) employment discrimination, and
- 2) perceived difficulty of school subjects.

Also, one general factor was found to be totally characteristic of and peculiar to the native student sample: the general personality factor - Factor II. This suggests that the personality structure of the non-native sample was too diverse to suggest a factor, whereas the personality structure of the native student sample was defined by the following major variables in decreasing factor loadings (Factor II):

- 1) feeling of need to be alone (.884)
- 2) perception of life as a series of problems (.877)
- 3) liking of same basic goals in life (.874)
- 4) acceptance of self (.861)
- 5) perception of conformity (.825)
- 6) expression of hope to master skill (.781)
- 7) amount of agency contact (.773)
- 8) need of always having friends around (.772)

Therefore, this general personality factor defines the composite personality structure of the native students, where there is no comparable non-native student factor.

The Combined Student Factors

Eighty of the same variables used in the separate student component analysis were analyzed to yield twenty orthogonal factors. The original correlation matrix of the eighty variables is presented in Appendix N. These factors were a combination of the factors isolated for the separate student samples. The same component analysis methods were used here as were used for the student component analysis.

The twenty factors isolated are presented below with a list of the contributing variables and accompanying factor loadings:

FACTOR 1 - Relationship with Teacher

- 1) Liking of teachers (-.802)
- 2) Perception of helpfulness of teachers (-.660)
- 3) Perception of teachers liking respondent (-.652)

FACTOR 2 - Trouble with Help from Public Services

- 1) Native ancestry (-.752)
- 2) Sex (+.712)
- 3) Amount of employment agency contact (-.664)
- 4) Trouble from welfare* (.517)
- 5) Amount of agency contact by family (-.496)
- 6) Trouble finding housing* (.426)
- 7) Trouble with service in bars* (.423)

FACTOR 3 - Perception of Adequacy of Agency Resources

- 1) Perception of inadequate variety of agencies (-.884)
- 2) Perception of generally inadequate agency service (-.876)
- 3) Perception of inadequate number of agencies (-.860)
- 4) Perception of agencies catering to needs (-.853)
- 5) Amount of agency contact for self (-.457)

* These variables most clearly and theoretically define FACTOR 2.

FACTOR 4 - Personal Discrimination - Persecution

- 1) Hassled by men (.880)
- 2) Hassled by people (.844)
- 3) Hassled in street (.469)

FACTOR 5 - Closness of Relationship With Family

- 1) Where go when frustrated (.662)
- 2) Where go for advice (.633)
- 3) Where go for emotional troubles (.540)
- 4) Where go when in trouble (.507)
- 5) Where go when lonely (.442)
- 6) Where go when broke (.411)

FACTOR 6 - No Trouble with Service in Public Places

- 1) Trouble with service in bus depot (-.789)
- 2) Trouble with service in stores (-.768)
- 3) Trouble with service from welfare (-.412)

FACTOR 7 - General Life Outlook and Adjustment

- 1) Perception of Edmontonians wanting to do things with you (.770)
- 2) Perception of Edmontonians trying to help you (.704)
- 3) Perception of Edmontonians trying to understand you (.649)
- 4) Perception of Edmontonians as friendly (.485)

FACTOR 8 - General Non-Adjustment to School

- 1) Perception of subjects' difficulty (.651)
- 2) Perceived trouble in making friends (.630)
- 3) Perception of teacher punishment (.614)
- 4) Humiliating examples by teacher (.419)

FACTOR 9 - Employment Discrimination

- 1) Part-time employment (-.907)
- 2) Liking of present job (-.803)
- 3) Feeling of being discriminated against on the job (.451)

FACTOR 10 - Non-Conformity to Conventional Norms

- 1) Need of always having friends around (-.653)
- 2) Perceived friendliness of police (-.396)
- 3) Prefer to live in Edmonton like others (-.384)
- 4) Perception of conformity (-.383)
- 5) Feeling of need to be alone (.382)

FACTOR 11 - Family Non-Intactness

- 1) Mother and father as family members (.871)
- 2) Living with family (-.738)
- 3) Perception of unhappy (.421)

FACTOR 12 - Ambition

- 1) Expression of hope to master skill (.511)
- 2) Liking of some basic goals in life (.478)
- 3) Summer employment (.459) \
- 4) Acceptance of self (.403)

FACTOR 13 - Perceived Discrimination of Edmontonians

- 1) Like Edmontonians (-.721)
- 2) Age (.584)
- 3) Perception of Edmontonians as friendly (-.551)

FACTOR 14 - General Non-Integration

- 1) Participation in community league (-.553)
- 2) Desire to integrate (-.521)
- 3) Desire for independence from others help (-.512)
- 4) Desire to achieve recognition (-.506)
- 5) Perception of place in school (-.475)

FACTOR 15 - Personal Alienation

- 1) Perception of difference between means and ends (-.640)
- 2) Experience of close interpersonal relations (-.538)

FACTOR 16 - Perceived Assimilation

- 1) Prefer to keep traditional way of life (-.758)
- 2) Prefer to practice traditions (-.615)

FACTOR 17 - Liking of School Subjects

- 1) Like subjects taking (.726)
- 2) Why likes subjects (-.619)
- 3) Perception of subjects' usefulness (.528)

FACTOR 18 - Non-Adjustment to Interpersonal Relations in School

- 1) Like other students (-.719)
- 2) Perception of students liking self (-.655)
- 3) Perception of happiness (-.423)

FACTOR 19 - General Discrimination and Disadvantage

- 1) Perceived avoidance of Edmontonians (.673)
- 2) Perception of Edmontonians as unfriendly (.629)
- 3) Trouble finding housing (.379)
- 4) Trouble finding employment (.365)

FACTOR 20 - Perceived Opportunity

- 1) Perception of good sense of humor (.672)
- 2) Desired grade level (.443)

Perceived Needs By Youth

The data in the table below (Table 9:8) presents the perceived needs of the native youth, as compared to the non-native youth.

TABLE 9:8Perceived Needs

Needs	Native Youth*		Non-Native Youth**		Probability***
	N	%	N	%	
1) Some basic goods in life	207	92.4	187	98.4	.01
2) Advice	196	87.5	178	93.7	> .05
3) To be alone	195	87.0	176	92.6	> .05
4) Independence	189	84.4	141	74.2	.02
5) Recognition from Others	160	71.4	115	60.5	.05
6) Money	133	59.4	168	88.4	.001
7) Help when in trouble	118	52.7	163	85.8	.001
8) Company (not to be lonely)	116	51.8	171	90.0	.001
9) Emotional support	109	48.7	166	87.4	.001
10) Always have friends around	82	36.6	29	15.3	.001
11) Release of tension	67	29.9	173	91.0	.001

* The percentages in this table are not cumulative, and therefore do not add up to 100.0%. The Total N here is 224

** The Total N = 190

*** This probability level was determined by the X^2 test for significant differences.

The data from Table 9:8 suggest that the perceived needs are significantly different for the two samples. The most noticeable differences were evident in terms of the needs of money, help when in trouble, company, emotional support, having friends around, and release of tension. The native youth are more likely than non-native youth to need independence, recognition from others, and always have friends around; whereas the non-native youth are more likely to need some basic goods in life, money, help when in trouble, company, and especially emotional support and release of tension.

Summary

A component analysis was carried out in the transient and student native samples, and the non-native samples.

Four specific types of discrimination were isolated for the native transient sample: 1) general social discrimination, 2) discrimination in terms of help from public services, 3) discrimination in personal interaction, and 4) discrimination in bars.

Eight orthogonal factors were isolated for the native student sample. These factors defined the following areas: 1) general adjustment to school, 2) general personality, 3) general integration, 4) general discrimination, 5) general life outlook and adjustment, 6) adjustment to interpersonal interaction in school, 7) conformity to conventional norms and values, and 8) closeness of relationship with family.

However, thirteen orthogonal factors were isolated for the comparative non-native sample. These factors defined the following areas: 1) perception of adequacy of agency resources, 2) relationship with teacher, 3) general

life outlook and adjustment, 4) trouble with help from public services (discrimination), 5) personal discrimination - persecution, 6) employment discrimination, 7) adjustment to interpersonal interaction in school, 8) trouble with service in public places, 9) liking of school subjects, 10) confidence or closeness of relationship, 11) perceived difficulty of school subjects, 12) assimilation, and 13) personal alienation.

A comparison of the native and non-native student factor structures isolated both differences and similarities. The "employment discrimination" and "perceived difficulty of school subjects" factors were peculiar to the non-native sample. The "employment discrimination" factor may be one specific type of discrimination that corresponds to the general native student discrimination factor, whereas the "perceived difficulty of school subjects" factor may not be applicable to the native students.

The general personality factor isolated for the native students was not present for the non-native students. This suggests that the personality structure of the native students was homogeneous enough to compose a common factor, whereas the non-native students possess too heterogeneous characteristics.

The majority of the other general native student factors were also present for the non-native students in the form of a composite of two to four more specific factors. For example, the native student "general adjustment to school" factor was found to be comparable to the non-native student factors of "liking of school subjects", and "relationship with teacher". A similar situation existed in terms of the "general discrimination or disadvantage" native student factor. This native student discrimination factor was similar to the four specific non-native student factors of "perception of adequacy of agency resources", "trouble with help from public services", "personal discrimination", and "desire to assimilate". This suggests that the native

student adjustment to school and perception of being disadvantaged or discriminated against, implies their total reaction to the white social milieu and/or societal system, whereas the non-native students do not have comparable general and total reactions. The non-native students may react to their surroundings on a greater individual basis, which may be explained in part by their greater individual differences (for example: no readily apparent general personality factor). In other words, the native student adjustment and general reaction to white society is more general, and homogeneous, whereas the non-native students react more to specific segments of their milieu. A very similar analysis was found in terms of the native student "general integration" factor.

Another interesting finding was that a "personal alienation" factor was isolated for the non-natives, whereas this factor was included in the "general life outlook and adjustment" factor of the native students. This suggests that alienation may be a part of the native student's general life outlook.

The greatest similarity in the factor structures of the two samples was the identification of an "adjustment to interpersonal interaction in school" factor for both student samples.

The following orthogonal factors were isolated for the combined student samples: 1) relationship with teacher, 2) trouble with help from public services, 3) perception of adequacy of agency resources, 4) personal discrimination or persecution, 5) closeness of relationship with family, 6) no trouble with service in public places, 7) general life outlook and adjustment, 8) general non-adjustment to school, 9) employment discrimination,

10) non-conformity to conventional norms, 11) family non-intactness, 12) ambition, 13) perceived discrimination of Edmontonians, 14) general non-integration, 15) personal alienation, 16) perceived assimilation, 17) liking of school subjects, 18) non-adjustment to interpersonal relations in school, 19) general discrimination and disadvantage, and 20) perceived opportunity.

The factors were used when possible, to define the variables in the descriptive and statistical hypotheses, to be presented below.

The need structure of the native youth was found to be statistically different from the non-native youth need structure. The native youth were more likely than the non-native youth to need independence, recognition from others, and having friends around; whereas the non-native youth were more likely (than the natives) to need some basic goods in life, money, help when in trouble, company; and most significantly, emotional support and release of tension.

CHAPTER X

DESCRIPTIVE HYPOTHESES

INTRODUCTION

The descriptive hypotheses are summary statements based on the need concepts (agency, education, employment and social information). The testing of the descriptive hypotheses will summarize and clarify the findings suggested by the descriptive analyses of Chapters V to IX.

The descriptive hypotheses state the expected relationships and the strength of these relationships, however no causal inferences will be made. Again, these hypotheses refer only to the student samples, controlling for ethnicity. It is suggested that if an original relationship found for the total sample is strengthened for the native student sample (controlling for ethnicity), this original relationship is partially explained by ethnicity. In other words, the relationships hypothesized may or may not be peculiar to the native sample. Age was also controlled for in the testing of these hypotheses. However, the sample size for the native youth produced many tables with zero cells, which makes the statistics obtained unreliable. Where there were no zero cells in the tables, the analysis controlling for age did not add to the interpretation of the data.

The remainder of this chapter will deal with a discussion of each individual hypothesis.

HYPOTHESIS 1:

The perception of adequacy of resources (educational and agency) to meet needs will be strongly and positively related to adjustment.

Three adjustment factors were isolated in Chapter IX:

- i) General life outlook or general adjustment.

- ii) General non-adjustment to school, and
- iii) Non-adjustment to inter-personal relationships in school.

A perception of adequacy of educational resources factor was isolated, Factor 17 (liking of school subjects). A perception of adequacy of agency resources factor was also isolated, Factor 3. Table 10:1 presents the relevant correlation matrix of these five factors, with native ancestry as a control.

TABLE 10:1

Gamma Correlations: Adequacy of Resources and Adjustment

<u>Relationship</u>	<u>Both Samples</u>	<u>Native</u>	<u>Non-Native</u>
Perceived adequacy of agency resources + General adjustment	.02	.03	.09
Perceived adequacy of agency resources + General non-adjustment to school	-.09	-.24	-.11
Perceived adequacy of agency resources + Non-adjustment to inter-personal relations in school	.11	.05	.04
Perceived adequacy of educational resources + General adjustment	.04	.10	-.16
Perceived adequacy of educational resources + General non-adjustment to school	-.24	-.19	-.26
Perceived adequacy of educational resources + Non-adjustment to inter- personal relations in school	-.10	-.11	-.05

It can be seen from Table 10:1 that there is a minimal relationship between perception of adequacy of resources to meet needs and adjustment, when native ancestry is not controlled for. There is a noticeable negative relationship between perceived adequacy of educational resources and general non-adjustment to school (gamma= -.24) and this relationship is not improved when native ancestry is controlled.

Controlling for native ancestry noticeably improved the relationship between perceived adequacy of agency resources and general non-adjustment to school (change of gamma from $-.09$ to $-.24$). Since this relationship is negative, it is not in correspondence with the hypothesized relationships.¹ Therefore, it is concluded that on the whole the relationships hypothesized in Hypothesis 1 do not exist, and the perception of adequacy of resources to meet needs is dependent on adjustment to school for the native students only.

HYPOTHESIS 2:

The perception of adequacy of resources (educational and agency) to meet needs will be strongly and negatively related to the unhappiness of youth.

The relationships between perception of adequacy of resources and unhappiness, controlling for ethnicity, are presented below in Table 10:2.

TABLE 10:2

Gamma Correlations: Adequacy of Resources and Unhappiness

<u>Relationship</u>	<u>Both Samples</u>	<u>Native</u>	<u>Non-Native</u>
Perceived adequacy of agency resources + unhappiness	$-.29$	$-.36$	$-.10$
Perceived adequacy of educational resources + unhappiness	$-.16$	$-.16$	$-.22$

The data in Table 10:2 suggest that there is a moderate negative relationship between perceived adequacy of resources (both agency and educational) and unhappiness (gammas of $-.29$ and $-.16$). Also, these relationships are not noticeably improved when native ancestry is controlled for. Therefore, it is concluded that the general relationships hypothesized in Hypothesis 2 were confirmed, but the strength of the relationships was not confirmed. There was found to be a moderate and negative relationship between perceived adequacy of resources (educational and agency) to meet needs and unhappiness.

1 A negative relationship between non-adjustment and perceived adequacy of agency resources is in correspondence to the hypothesized positive relationship between adjustment and perceived adequacy of agency resources.

HYPOTHESIS 3:

There will be a strong and positive relationship between closeness of relationship to family and adjustment.

Table 10:3 presents the relationships between closeness of relationship to family and adjustment.

TABLE 10:3

Gamma Correlations: Closeness of Relationship
to Family and Adjustment

<u>Relationship</u>	<u>Both Samples</u>	<u>Native</u>	<u>Non-Native</u>
Closeness of relationship to family + general adjustment	.21	.41	.13
Closeness of relationship to family + general non-adjustment to school	-.06	-.05	-.12
Closeness of relationship to family + non-adjustment to inter-personal relationships to school	-.01	-.10	-.03

It can be seen from Table 10:3 that a moderate relationship exists between closeness of relationship to family and general adjustment, for both samples (.21). This finding in itself only partially supports Hypothesis 3. However, when this relationship is tested while controlling for native ancestry, the relationship is greatly improved for the native part of the samples (.41), and this same relationship decreases in strength for the non-natives (.13). Therefore, Hypothesis 3 is not confirmed. Even though a moderate and positive relationship exists between closeness of relationship to family and general adjustment, this is mainly explained by the strong relationship of these two variables for the native youth sample only. This suggests that the strong and positive relationship between closeness of relationship to family and general adjustment is peculiar to the native youth sample. It is also important to point out that there is no relationship

between general school non-adjustment or non-adjustment to interpersonal relations in school and closeness of relationship to family for either sample.

HYPOTHESIS 4:

There will be a strong and negative relationship between summer unemployment and perceived adequacy of resources (educational and agency) to meet needs.

The relationships between summer unemployment and perceived adequacy of resources are presented below in Table 10:4.

TABLE 10:4

Gamma Correlations: Summer Unemployment and Perceived Adequacy of Agency Resources

<u>Relationship</u>	<u>Both Samples</u>	<u>Native</u>	<u>Non-Native</u>
Summer unemployment + perceived adequacy of agency resources	-.06	-.19	-.10
Summer unemployment + perceived adequacy of educational resources	.13	.22	.11

It can be seen from Table 10:4 that there is a minimal relationship between summer unemployment and perceived adequacy of resources (both agency (-.06) and educational (.13)). However, when ethnicity is controlled for, the original relationship is strengthened for the native youth sample. A small and negative relationship is found between summer unemployment and perceived adequacy of agency resources for the native youth sample (-.19). However, a small and positive relationship is also found between summer unemployment and perceived adequacy of educational resources (.22). The opposite directions and minimal strength of these relationships does not add clarity to the original hypothesis. It is concluded that Hypothesis 4 is not confirmed, and therefore there is no relationship between summer unemployment and perceived

adequacy of resources for the total samples. However, it is suggested that there is a small and positive relationship between summer unemployment and perceived adequacy of educational resources for the native sample (.22), and a small and negative relationship between summer unemployment and perceived adequacy of agency resources (-.19), also for the native sample.

HYPOTHESIS 5:

Perceived opportunity will be strongly and negatively related to alienation and discrimination.

Six types of discrimination were isolated by the component analysis in Chapter IX:

- i) trouble with help from public services,
- ii) personal discrimination or persecution,
- iii) no trouble with service in public places,
- iv) employment discrimination
- v) perceived discrimination of Edmontonians, and
- vi) general discrimination and disadvantage.

Table 10:5 presents the gamma correlations relevant to Hypothesis 5.

TABLE 10:5

Gamma Correlations: Perceived Opportunity, and Alienation and Discrimination

<u>Relationship</u>	<u>Both Samples</u>	<u>Native</u>	<u>Non-Native</u>
Perceived opportunity + personal alienation	-.04	-.06	.06
Perceived opportunity + trouble with help from public services	-.10	.10	.04
Perceived opportunity + personal discrimination or persecution	.10	.13	.11
Perceived opportunity + no trouble with service in public places	-.06	-.24	-.02
Perceived opportunity + employment discrimination	-.04	.02	-.02
Perceived opportunity + perceived discrimination of Edmontonians	.00	.02	.03
Perceived opportunity + general discrimination and disadvantage	.14	.08	.18

The data in Table 10:5 suggest that no relationships exist between perceived opportunity and alienation or discrimination, when these relationships are tested across the youth samples. However, when native ancestry is controlled for, a moderate and negative relationship exists between perceived opportunity and "no trouble with service in public places" (gamma = $-.24$). This is the only noticeable relationship. Therefore, Hypothesis 5 is not confirmed. However, a moderate and negative relationship exists between perceived opportunity and "no trouble with service in public places" (as a type of non-discrimination) for the native student sample. This suggests that a moderate and negative relationship between one type of non-discrimination and perceived opportunity is peculiar to the native student sample.

HYPOTHESIS 6:

There will be a strong relationship between adjustment factors and general personality variables.

Table 10:6 presents the correlations between the three adjustment factors and the general personality variables of desire for independence, desire to achieve recognition, ambition (hope to master some skill), acceptance of self, experience of close interpersonal relationships, possession of a good sense of humor, and perception of conformity.

TABLE 10:6

Gamma Correlations: Adjustment Factors and General Personality Variables

<u>Relationship</u>	<u>Both Samples</u>	<u>Native</u>	<u>Non-Native</u>
I. General Adjustment +			
desire for independence	-.12	.34	-.11
desire to achieve recognition	.12	.09	.10
ambition	.22	.29	.19
acceptance of self	.12	.21	.04
experience of close interpersonal relationships	.14	-.05	.25
possession of good sense of humor	.11	.38	-.06
perception of conformity	.04	-.01	.12
II. General Non-Adjustment to School +			
desire for independence	-.25	-.11	-.25
desire to achieve recognition	-.06	.03	-.07
ambition	-.12	.05	-.28
acceptance of self	-.04	-.12	.05
experience of close interpersonal relationships	-.08	.18	-.09
possession of a good sense of humor	-.12	-.19	-.07
perception of conformity	-.24	-.09	-.42
III. Non-Adjustment to Interpersonal Relationships in School +			
desire for independence	-.15	-.10	-.12
desire to achieve recognition	-.15	-.30	.05
ambition	-.39	-.45	-.33
acceptance of self	-.30	-.51	-.08
experience of close interpersonal relationships	.10	.05	.13
possession of good sense of humor	-.08	-.26	.15
perception of conformity	-.24	-.21	-.32

It can be seen from Table 10:6 that there are only a few moderate relationships between the adjustment factors and general personality variables, for the combined youth samples. The strongest relationships exist between ambition and non-adjustment to interpersonal relationships in school (-.39), and acceptance of self and non-adjustment to interpersonal relationships in school (-.30). However, these relationships are strengthened when the analysis controls for native ancestry. That is, a high and negative relationship (-.45) exists between ambition and non-adjustment to interpersonal relationships in school, and a high and negative relationship (-.51) exists between acceptance of self and non-adjustment to interpersonal relationships in school, for the native students only. This suggests that the strong and negative relationships between non-adjustment to interpersonal relationships in school and ambition, and acceptance of self are peculiar to the native youth.

A number of other relationships seem to be peculiar to the native youth sample:

- 1) a moderate and positive relationship between general adjustment and desire for independence ($\gamma = .34$),
- 2) a moderate and positive relationship between possession of a good sense of humor and general adjustment ($\gamma = .30$),
- 3) a small and positive relationship between experience of close interpersonal relations and general non-adjustment to school ($\gamma = .18$),
- 4) a moderate and negative relationship between desire to achieve recognition and non-adjustment to interpersonal relations in school ($\gamma = -.30$),
- 5) a moderate and negative relationship between possession of a good sense of humor and non-adjustment to interpersonal relations in school (-.26), and
- 6) a moderate and positive relationship between ambition and general adjustment (.29).

A number of relationships are characteristic of the non-native youth, and do not exist for the native youth:

- 1) a moderate and positive relationship between experience of close interpersonal relationships and general adjustment (.25),
- 2) a moderate and negative relationship between ambition and general non-adjustment to school (-.28),
- 3) a strong and negative relationship between perception of conformity and general non-adjustment to school (-.42), and
- 4) a moderate and negative relationship between desire for independence and general non-adjustment to school (-.25).

This suggests that certain personality characteristics are related to adjustment of the separate native and non-native samples. The personality characteristics define both the native and non-native youth who are adjusted, whether it is general adjustment, whether they are not adjusted to school, and/or whether they are not adjusted to interpersonal relations in school.

The native students who are generally adjusted to society are more likely to have:

- i) desire for independence (.34)
- ii) ambition (.29), and
- iii) possession of a good sense of humor (.38).

Also, those native students who are generally non-adjusted to school are slightly more likely to have had experience of close interpersonal relationships (.18).

The native students who are non-adjusted to interpersonal relations in school are less likely to have:

- i) desire to achieve recognition (-.30)
- ii) ambition (-.45)
- iii) acceptance of self (-.51), and
- iv) possession of a good sense of humor (-.26).

This suggests that the native students who have adjusted to society seem to have higher initiative and desire for achievement. This also seems to suggest that native students who have adjusted to school in general are less likely to have had close interpersonal relationships with others, and vice versa. Also, the native students who have not adjusted to the interpersonal relationships in school seem less likely to have a desire to achieve recognition, ambition, accept themselves and possess a good sense of humor. This in turn suggests that those who have adjusted to the formal interaction in school have entered into the competitive and general social atmosphere of the school.

Therefore, the characteristics of the adjusted native student have been isolated. However, Hypothesis 6 was not confirmed because the strongest relationships that existed between the adjustment factors and general personality variables were found for either the native or non-native students, rather than the total sample.

HYPOTHESIS 7:

There will be a strong and positive relationship between intactness of home and adjustment.

Table 10:7 presents the relevant correlations.

TABLE 10:7

Gamma Correlations: Non-Intactness of Home and Adjustment

<u>Relationships</u>	<u>Both Samples</u>	<u>Native</u>	<u>Non-Native</u>
Non-Intactness of home & general adjustment	.11	.04	.08
Non-Intactness of home + general non-adjustment to school	.06	.20	.10
Non-Intactness of home + non-adjustment to interpersonal relations in school	-.02	.01	.17

The data from Table 10:7 show that there is no relationship between non-intactness of home and adjustment for the total youth sample. However, when native ancestry is controlled for, a small and positive relationship is found between non-intactness of home and general non-adjustment to school for the native students ($\gamma = .20$). This seems to suggest that it is more likely that a native student who has an intact home will be adjusted to school in general, and vice versa.

Also, a slight and positive relationship was found between non-intactness of home and non-adjustment to interpersonal relations in school, for the non-native students only ($\gamma = .17$). This suggests that the factor of non-intactness of home is related to poor interpersonal relations in school for the non-native students.

Therefore, Hypothesis 7 was not confirmed. However, the factor of intactness of home is slightly important to the native students' general adjustment to school, and is also slightly important to the non-native students' adjustment to interpersonal relations in school.

SUMMARY

A list of the findings in testing the seven descriptive hypotheses, while controlling for native ancestry, is presented below:

- 1) The perception of adequacy of resources to meet needs (educational and agency) were not found to be related to adjustment for the total student samples. However, for the native student (but not the non-native student) sample, the perception of adequacy of agency resources to meet needs is moderately dependent on adjustment to school and vice versa.

- 2) The perception of adequacy of resources (both educational and agency) to meet needs was found to be moderately and negatively related to the unhappiness of youth (both native and non-native).
- 3) The moderate and positive relationship found between closeness of relationship to family and general adjustment for both youth samples, is explained by the strong relationship of these variables for the native youth sample only. The strong and positive relationship between closeness of relationship to family and general adjustment is peculiar to the native students.
- 4) No relationship was found between summer unemployment and perceived adequacy of resources for both youth samples. When native ancestry was controlled for only a small positive relationship was found between summer unemployment and perceived adequacy of educational resources for the native youth, and this relationship was not in the direction hypothesized.
- 5) No relationship was found between perceived opportunity and alienation, or between perceived opportunity and discrimination, when tested across the youth samples. However when native ancestry was controlled for, a moderate and negative relationship was found between one type of non-discrimination (trouble with service in public places) and perceived opportunity for the native youth only. This relationship describes a situation peculiar to the native youth.
- 6) Certain personality characteristics were found to be related to the adjustment of the two separate samples:
 - a) the native students who are generally adjusted to society are more likely to have a desire for independence, ambition and possess a good sense of humor. This suggests that the native students who have adjusted to society seem to have gained in individuality and/or initiative.

b) The native students who are generally non-adjusted to school are slightly more likely to have had experience of close interpersonal relationships.

This suggests that native students who have adjusted to school, may be using the scholastic experience as a substitute for the close interpersonal relationships that they lack (either in or outside the home).

c) The native students who are not adjusted to interpersonal relations in school are less likely to have a desire to achieve recognition, ambition, and a good sense of humor. These students are also less likely to accept themselves. This suggests that the students who have adjusted well into the school social milieu, have not only accepted themselves, but have also been accepted by their peers, and those who have not adjusted well into the school social milieu have not been accepted by others or themselves.

d) The non-native students who are generally adjusted to school are also more likely to have high ambition, a perception of conformity and a desire for independence.

These findings define the characteristics of the adjusted native and non-native students as generally different. The characteristics of native youth who have adjusted to society seem to indicate that they have also integrated well into the system. In the process of adjustment and possibly integration, the native youth seem to have gained in their individuality and initiative. Also, the adjustment to school in general is seen as an attempt to fill the interaction gap, whereas the adjustment to interpersonal relations in school is seen as a process of integration into the school's social milieu.

7) No relationship was found between non-intactness of home and adjustment for the total youth samples. However, it was also found that the native students who have non-intact homes are more likely to be non-adjusted to school in general. It was also found that non-intactness of home was related to poor interpersonal relations in the school for the non-native students.

It is pointed out here that intactness of home does not necessarily mean that the youth is experiencing close interpersonal relationships within the home. Intactness of home describes the physical characteristics of the home while the presence of interpersonal relationships describes the quality of the relationship within the home.

CHAPTER XI

STATISTICAL HYPOTHESES

INTRODUCTION

Two general statistical hypotheses were suggested to define the peculiarity of the native student needs and characteristics in terms of the non-native sample. These two hypotheses are outlined below.

These general hypotheses were indirectly analyzed by testing the specific hypotheses outlined under each general hypothesis. The Chi-square (χ^2) two sample test for significant differences was used to test the specific hypotheses outlined below. Therefore, the personal characteristics and needs of the native sample and the statistical differences between the native and non-native samples were defined. As pointed out in Chapter X, controlling for age was not consistently possible because of the large number of zero cells.

The concepts outlined in the statistical hypotheses were measured by using the factors isolated for the total samples where possible. Otherwise the analysis on relevant items from Chapters VI to IX was used to test the hypotheses.

FINDINGS

General Hypothesis 1: The general personality characteristics of native youth will not differ significantly from the general personal characteristics of the non-native youth. However, there will be specific characteristics that will differentiate the two groups from each other.

Specific statistical Hypotheses 1 to 5 will be separately discussed below.

Hypothesis 1: The native youth will have significantly lower perceived opportunity, adjustment, and perceived assimilation than the non-native youth.

Tables 11:1 to 11:5 present the relevant statistics to test Hypothesis 1.

TABLE 11:1

Perceived Opportunity and Ethnicity

<u>Ethnicity</u>	<u>Perceived Opportunity</u>							
	Low		Medium		High		Total	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Native	50	35.0	68	47.6	25	17.5	143	100.1
Non-Native	41	21.6	109	57.4	40	21.1	190	100.1
Gamma = .22		Chi-square = 7.362		Probability		<.05		

The data in Table 11:1 show that there is a significant difference ($P < .05$) between the perceived opportunity of the two samples. The gamma value of .22 suggests that the native students have significantly lower perceived opportunity than the non-native students.

As outlined in Chapters IX and X above, three types of adjustment have been isolated: i) general adjustment to society, ii) general non-adjustment to school, and iii) non-adjustment to interpersonal relations in school. The relationship of these three types of adjustment to ethnicity is defined in Tables 11:2 to 11:4.

TABLE 11:2

General Adjustment to Society and Ethnicity

<u>Ethnicity</u>	<u>Adjustment</u>							
	Low		Medium		High		Total	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Native	28	19.6	86	60.1	29	20.3	143	100.0
Non-Native	27	14.2	106	55.8	57	30.0	190	100.0

Gamma = .21

Chi-square = 4.677

Probability \leq .10

TABLE 11:3

General Non-Adjustment to School and Ethnicity

<u>Ethnicity</u>	<u>Adjustment</u>							
	Low		Medium		High		Total	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Native	29	20.3	55	38.5	59	41.3	143	100.1
Non-Native	65	34.2	65	34.2	60	31.6	190	100.0

Gamma = -.24

Chi-square = 8.158

Probability = \leq .05

TABLE 11:4

Non-Adjustment to Interpersonal Relations in School and Ethnicity

<u>Ethnicity</u>	<u>Adjustment</u>							
	Low		Medium		High		Total	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Native	23	16.1	84	58.7	36	25.2	143	100.0
Non-Native	29	15.3	147	77.4	14	7.4	190	100.1

Gamma = -.29

Chi-square = 21.346

Probability \leq .05

The data in Tables 11:2 to 11:4 suggest that the native students have significantly higher general non-adjustment to school ($P < .05$) and non-adjustment to interpersonal relations in school ($P < .05$) than the non-native students. However, the non-natives have noticeably (but not statistically significant) higher general adjustment to society ($P < .10$) than the native students. These findings add to the descriptive analysis presented in Chapter VII. The implications of these findings will be discussed in Chapter XII.

The relationship of assimilation to ethnicity is defined below in Table 11:5.

TABLE 11:5

Perceived Assimilation and Ethnicity

<u>Ethnicity</u>	<u>Assimilation</u>							
	Low		Medium		High		Total	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Native	18	12.6	70	49.0	55	38.5	143	100.1
Non-Native	90	47.4	50	26.3	50	26.3	190	100.0
Gamma = .45 Chi-square = 45.851 Probability < .05								

The data from Table 11:5 suggest that the native students are statistically more likely to perceive themselves assimilated into society than the non-native students ($P < .05$).

The findings outlined in Tables 11:1 to 11:5 do not completely confirm Hypothesis 1. The native youth were found to have significantly lower perceived opportunity, general adjustment to society (not statistically significant), general adjustment to school, and adjustment to interpersonal relations in school. However, the native students were also found to have significantly higher perceived assimilation.

Hypothesis 2: The native youth will be significantly higher than the non-native youth in terms of alienation and discrimination.

As defined in Chapters IX and X, six types of discrimination were isolated: i) trouble with help from public services, ii) personal discrimination or persecution, iii) no trouble with service in public places, iv) employment discrimination, v) perceived discrimination of Edmontonians, and vi) general discrimination and disadvantage. Tables 11:6 to 11:12 will present the relationship of each of these discrimination factors and alienation to ethnicity.

TABLE 11:6

Personal Alienation and Ethnicity

Gamma = -.24

Chi-square = 15.068

Probability $< .05$

TABLE 11:7

Trouble with Help from Public Services and Ethnicity

Gamma = $\frac{10 - 0}{10 + 0} = .96$

Chi-square = 191.770

Probability $< .05$

TABLE 11:8

Personal Discrimination or Persecution and Ethnicity

<u>Ethnicity</u>	<u>Discrimination</u>							
	Low		Medium		High		Total	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Native	35	24.5	42	29.4	66	46.2	143	100.1
Non-Native	72	37.9	33	17.4	85	44.7	190	100.0

Gamma = -.13

Chi-square = 9.827

Probability < .05

TABLE 11:9

No Trouble with Service in Public Places and Ethnicity

<u>Ethnicity</u>	<u>Discrimination</u>							
	Low		Medium		High		Total	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Native	90	62.9	31	21.7	22	15.4	143	100.0
Non-Native	66	34.7	59	31.1	65	34.2	190	100.0

Gamma = .47

Chi-square = 27.572

Probability < .05

TABLE 11:10

Employment Discrimination and Ethnicity

<u>Ethnicity</u>	<u>Discrimination</u>							
	Low		Medium		High		Total	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Native	14	9.8	87	60.8	42	29.4	143	100.0
Non-Native	36	18.9	129	67.9	25	13.2	190	100.0

Gamma = -.40

Chi-square = 15.842

Probability < .05

TABLE 11:11

Perceived Discrimination of Edmontonians and Ethnicity

<u>Ethnicity</u>	<u>Discrimination</u>							
	Low		Medium		High		Total	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Native	24	16.8	75	52.4	44	30.8	143	100.0
Non-Native	26	13.7	139	73.2	25	13.2	190	100.1

Gamma = -.23

Chi-square = 18.181

Probability < .05

TABLE 11:12

General Discrimination and Ethnicity

<u>Ethnicity</u>	<u>Discrimination</u>							
	Low		Medium		High		Total	
	N	%	N	%	N	%	N	%
Native	44	30.8	37	25.9	62	43.4	143	100.1
Non-Native	39	20.5	64	33.7	87	45.8	190	100.0

Gamma = .12

Chi-square = 5.183

Probability = $< .07$

The data in Tables 11:7, 11:8, 11:9, 11:10 and 11:11 define the native students as being significantly higher in terms of five types of discrimination. The high relationship between ethnicity and trouble with help from public services (Table 11:7) may be due in part to the lower contact of non-natives with public help services.

There is no significant difference between the amount of general discrimination for the native students as compared to the non-natives ($P < .05$).

This analysis suggests that on the whole, the data supports Hypothesis 2. The native youth were found to be significantly higher than the non-native youth in terms of personal alienation and five of the six types of discrimination.

Hypothesis 3: The degree of closeness of relationship between the native youth and their parents will be significantly higher than that between non-native youth and their parents.

The data to test Hypothesis 3 is presented below in Table 11:13.

TABLE 11:13

Closeness of Relationship to Parents and Ethnicity

<u>Ethnicity</u>	<u>Closness of Relationship</u>							
	Low		Medium		High		Total	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Native	26	18.2	46	32.2	71	49.7	143	100.1
Non-Native	57	30.0	77	40.5	56	29.5	190	100.0

Gamma = $-.34$

Chi-square = 14.825

Probability $< .05$

The data in Table 11:13 suggests that the native students have a significantly higher degree of closeness of relationship to their parents than the non-natives ($P < .05$).

Hypothesis 4: The two samples will not differ significantly in terms of the following general personality items: desire for independence, and possession of a good sense of humour.

Tables 11:14 and 11:15 present the data to test this hypothesis.

TABLE 11:14

Desire for Independence and Ethnicity

<u>Ethnicity</u>	<u>Desire for Independence</u>							
	Yes		No		N.R.		Total	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Native	118	82.5	14	9.8	11	7.7	143	100.0
Non-Native	141	74.2	41	21.6	8	4.2	190	100.0

Gamma = $.42$

Chi-square = 7.526

Probability $< .05$

TABLE 11:15

Possession of a Good Sense of Humour and Ethnicity

<u>Ethnicity</u>	<u>Possession of a Good Sense of Humour</u>							
	Yes		No		N.R.		Total	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Native	108	75.5	25	17.5	10	7.0	143	100.0
Non-Native	139	73.2	41	21.6	10	5.3	190	100.1

Gamma = .12

Chi-square = .728

Probability > .10

The data in Table 11:14 suggests that the native youth students have a much higher desire for independence than the non-natives ($p < .05$) and vice versa (i.e. the non-natives have a much lower desire of independence from others' help). However, it can be seen from Table 11:15 that there is no significant difference between the two samples on possession of a good sense of humour. Therefore, it is concluded that Hypothesis 4 is only partially affirmed. Also, native students are statistically more likely to have a high desire for independence than the non-native students.

Hypothesis 5: The two samples will differ significantly in terms of desire for recognition, ambition, acceptance of self, and conformity.

Tables 11:16 to 11:19 will present the relevant data to test Hypothesis 5.

TABLE 11:16

Desire for Recognition and Ethnicity

<u>Ethnicity</u>	<u>Desire for Recognition</u>							
	Yes		No		N.R.		Total	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Native	96	67.1	31	21.7	16	11.2	143	100.0
Non-Native	115	60.5	63	33.4	12	6.3	190	100.2

Gamma = .26

Chi-square = 4.194

Probability = $< .05$

TABLE 11:17

Ambition and Ethnicity

<u>Ethnicity</u>	<u>Ambition (Expression of hope to master some skill)</u>							
	Yes		No		N.R.		Total	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Native	119	83.2	17	11.9	7	4.9	143	100.0
Non-Native	163	85.8	19	10.0	8	4.2	190	100.0

Gamma = -.10

Chi-square = 0.329

Probability $> .10$

TABLE 11:18

Acceptance of Self and Ethnicity

<u>Ethnicity</u>	<u>Acceptance of Self</u>							
	Yes		No		N.R.		Total	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Native	126	88.1	13	9.1	4	2.8	143	100.0
Non-Native	140	73.7	48	25.3	2	1.1	190	100.0

Gamma = .54

Chi-square = 13.786

Probability $< .05$

TABLE 11:19

Conformity and Ethnicity

<u>Ethnicity</u>	<u>Conformity</u>							
	Yes		No		N.R.		Total	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Native	115	80.4	23	16.1	5	3.5	143	100.0
Non-Native	164	86.3	23	12.1	3	1.6	190	100.0

Gamma = -.18

Chi-square = 1.246

Probability $> .10$

The data in Tables 11:16 and 11:18 suggest that the native students have a much stronger desire for recognition ($P < .05$) and a higher degree of acceptance of self ($P < .05$), as compared to the non-native students. However, there were no significant differences in the amount of ambition and conformity between the two samples. Therefore, Hypothesis 5 is only partially affirmed, in that the native students have a higher degree of acceptance of self and a stronger desire for recognition from others.

General Hypothesis II: The perceived general needs and the realization of these needs for native students, will not differ significantly from the perceived general needs and the realization of these needs for non-native youth. However, there will be different specific needs associated with differentiating personality characteristics for the two samples.

Specific statistical Hypothesis 6 to 11 will be separately discussed below.

Hypothesis 6: The perception of the adequacy of resources (educational and agency) to meet needs will be the same for the two school samples.

In Chapter VI (page 91) it was suggested that only one major difference existed between the native and non-native samples in terms of perceived adequacy of agency resources, i.e. the non-native youth were less likely to see the agencies available as catering to the needs of the people. Therefore, it is suggested that the non-native students perceive the agency resources as less adequate than the native students.

In Chapter VII (page 112) it was found that there were no significant differences between the native and non-native youth perceptions of teacher helpfulness and discrimination. There were no statistically significant differences between the native and non-native students liking of school subjects. The native students were found to be less likely than the non-native students to perceive the subjects they were taking as difficult. However, it was suggested that the over-all perceptions of the adequacy of the educational resources to meet needs were the same for the two samples.

In combination with these findings, the data in Tables 11:20 and 11:21 was analyzed.

TABLE 11:20

Perception of Adequacy of Agency Resources and Ethnicity

<u>Ethnicity</u>	<u>Perception of Adequacy of Agency Resources</u>							
	Low		Medium		High		TOTAL	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Native	17	11.9	71	49.7	55	38.5	143	100.1
Non-Native	57	30.0	98	51.6	35	18.4	190	100.0

Gamma = $-.45$

Chi-square = 24.229

Probability $< .05$

TABLE 11:21

Perception of Adequacy of Educational Resources (Liking of School Subjects) and Ethnicity

<u>Ethnicity</u>	<u>Perception of Adequacy of Educational Resources</u>							
	Low		Medium		High		Total	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Native	57	39.9	54	37.8	32	22.4	143	100.1
Non-Native	68	35.8	60	31.6	62	32.6	190	100.0

Gamma = $.14$

Chi-square = 4.310

Probability $> .10$

The data in Table 11:20 suggest that a significantly higher proportion of the native students perceive the agency resources as adequate, compared to the non-native students ($\gamma = -.45$, $P < .05$). However, there is no significant difference between the two samples in terms of perception of adequacy of educational resources ($P > .10$). Therefore, Hypothesis 6 is only partially affirmed, and the descriptive findings re adequacy of resources presented in Chapters VI and VII were affirmed. Also, it is important to point out that the native students are significantly more likely than the non-natives to perceive the agency resources they know of as adequate.

Hypothesis 7:

The reasons considered for leaving school will be the same for the two samples.

The data to test this hypothesis is directly from Chapter VII (Table 7:25, page 125). The data in Table 7:25 showed that there were no significant differences between the two samples' reasons considered for leaving school. Two reasons seemed to be specific to the native youth sample, as they were given more frequently by this sample: i) the need to stay home and help, and ii) the characteristic of being too old for their grade level. However, Hypothesis 7 was statistically confirmed, and the reasons considered for leaving school were not statistically different.

Hypothesis 8:

The extent and character of employment (summer and student) will be the same for the two samples.

The analysis in Chapter VIII is directly applicable to Hypothesis 8. This analysis is mainly descriptive because the size of sample that was

employed was under 50. However, the conclusions drawn were:

- i) the non-native students were more likely to be employed than the native students,
- ii) both the native and non-native students were most likely to have construction (manual and farm) or babysitting jobs,
- iii) the native students were found to work on the average, more hours per week than the non-native students,
- iv) the majority of both student samples worked during afternoons or evenings only,
- v) summer employment was noticeably greater for the non-native as compared to the native students,
- vi) there were no statistical differences in the types of jobs the two samples had during the summer,
- vii) the native youth tended to work more hours per week during the summer, but for shorter periods.

Statistically, the data on the amount of summer employment is presented in Table 11:22.

TABLE 11:22

Summer Employment and Ethnicity

<u>Ethnicity</u>	<u>Summer Employment</u>							
	Yes		No		N.R.		Total	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Native	31	21.7	95	66.4	17	11.9	143	100.0
Non-Native	64	33.7	118	62.1	8	4.2	190	100.0

Gamma = -.25

Chi-square = 3.894

Probability < .05

The data in Table 11:22 suggest that the non-native students are significantly more likely to be employed during the summer than the native students ($p < .05$). This finding is in contradiction to the hypothesized relationship in Hypothesis 8. Therefore, Hypothesis 8 is not affirmed, and the extent and character of employment (both summer and student) are not the same for the two samples.

Hypothesis 9:

The amount of agency contact will be significantly different for the two samples (more in terms of the native youth sample).

Table 11:23 presents the data to test Hypothesis 9.

TABLE 11:23

Amount of Agency Contact by Self and Ethnicity

<u>Ethnicity</u>	<u>Amount of Agency Contact</u>							
	Yes		No		N.R.		Total	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Native	36	25.2	91	63.6	16	11.2	143	100.0
Non-Native	6	3.2	172	90.5	12	6.3	190	100.0

Gamma = .84

Chi-square = 38.936

Probability < .05

The data in Table 11:23 show that the native youth have had significantly more contact with agencies than the non-native youth ($p < .05$). Therefore, Hypothesis 9 is affirmed, in that the amount of agency contact is significantly different for the two samples.

Hypothesis 10:

The educational goals and needs will be significantly different for the two samples.

Chapter VII dealt extensively with Youth educational goals and needs (see Tables 7:15 and 7:16, pages 114 and 115). The findings were that: i) the educational expectations and goals were significantly lower for the native youth, as compared to the non-native youth ($p < .05$), and ii) a larger percentage of native youth feel that they have the specified grade level as a goal, in order to enter into further education ($p < .05$). The suggested conclusion was that the native youth formulate shorter range educational goals than the non-native youth.

Therefore it is concluded that the educational goals and needs are significantly different for the two samples, thus confirming Hypothesis 10.

Hypothesis 11:

The part-time student occupations will not be significantly different for the two samples.

The data to test this hypothesis (Hypothesis 11) is directly taken from Chapter VIII (Table 8:3, page 132). A test of significance was not applicable, for the number of each sample that was employed was less than 50. There were minimal noticeable differences, except that the native youth were slightly more likely to have construction or manual labor jobs, while the non-native youth were more likely to have baby-sitting jobs or delivery jobs. However, Hypothesis 11 is confirmed because the part-time student occupations of the two samples were not significantly different.

SUMMARY

A list of the findings in testing the five statistical hypotheses, and thus defining the peculiarity of the native student characteristics, is presented below:

- 1) The native youth were found to have significantly lower perceived opportunity, than the non-native youth.
- 2) The native youth were found to have significantly lower general adjustment to school, and adjustment to interpersonal relations in school, than the non-native youth. There were no significant differences in general adjustment to society for the two samples.
- 3) The native youth were found to have significantly higher perceived assimilation than the non-native youth.
- 4) The native youth were found to be significantly higher in terms of the following five types of perceived discrimination:
 - a) trouble with help from public services
 - b) personal discrimination or persecution
 - c) employment discrimination
 - d) perceived discrimination of Edmontonians
 - e) trouble with service in public places
- 5) There was no significant difference in the amount of general perceived discrimination for the two samples.
- 6) The native students have a significantly higher degree of closeness of relationship with their parents, as compared to the non-native youth.
- 7) The native students have a much stronger desire for independence than the non-natives, but the samples are not significantly different in terms of possession of a good sense of humor.

- 8) The native students were found to have a stronger desire for recognition, and a higher degree of acceptance of self, as compared to the non-natives.
- 9) There were no significant differences in the amount of ambition and conformity for the two samples.

These findings reflect directly on the General Hypothesis I. The general personality characteristics that were the same for the two samples were:

- i) general discrimination
- ii) possession of a good sense of humor
- iii) ambition
- iv) conformity

The specific characteristics that define the native student sample were:

- i) lower perceived opportunity
- ii) lower general adjustment to society (not statistically significant)
- iii) lower general adjustment to school
- iv) lower adjustment to interpersonal relations in school
- v) higher perceived assimilation
- vi) higher perceived discrimination with help from public services, personal interactions, interactions with Edmontonians, and employment.
- vii) more trouble with service in public places, than non-natives
- viii) higher degree of closeness of relationship with parents
- ix) stronger desire for independence
- x) stronger desire for recognition
- xi) higher degree of acceptance of self

The above characteristics are directly related to the discussion of the native youth needs, presented below. The findings summarized below refer directly back to General Hypothesis II.

- 1) A significantly higher proportion of the native students perceive the agency resources as adequate compared to the non-natives. However, the majority of both samples view these agencies as inadequate.
- 2) There were no significant differences between the two samples in terms of perception of adequacy of educational resources (liking of school subjects).
- 3) There were no significant differences between the two samples re reasons considered for leaving school. However, the native youth gave the following reasons more frequently than the non-natives, thus defining reasons peculiar to the native students: "the need to stay home and help", and "the characteristic of being too old for their grade level".
- 4) Non-native students are more likely to be employed during the summer (and during the school year) than the native students. When the native students were working they tended to work more hours per week, but for shorter periods.
- 5) The native students have had significantly more contact with agencies than the non-native students.
- 6) The native students have significantly lower educational expectations and goals, as compared to the non-native student. The larger percentage of native students than non-natives held further education as their immediate educational goal. This suggested that the native students formulate not necessarily lower, but shorter range educational goals than the non-natives.
- 7) The part-time occupations of the two student samples were not significantly different. However, the native students were slightly more likely to have construction or manual labor jobs, while the non-native students were more likely to have baby-sitting or delivery jobs.

In summary, the general educational resources are seen as equally adequate, whereas the native youth perceive the agency resources as more adequate than the non-natives. The employment needs of the native students are not as likely to be met as those of the non-natives, because the natives are more likely to be unemployed.

The native students tend to be required to stay home and help more than non-natives, and tend to be older than their classmates, which defines two specific problem areas of the native students. The native students may need special attention to keep them in school (economic support) and to keep them up with their classmates (scholastic support). The native students also have shorter range educational goals, which is linked to their lower perceived opportunity, discrepancy between goals and means, and their perceptions of others' expectations (self-fulfilling prophecy). This may suggest another special area of educational needs, which are peculiar to the native students.

CHAPTER XII

SUMMARY AND CONCLUSIONS

INTRODUCTION

This chapter will contain a summary of the descriptive data analysis from Chapters V to IX, and a summary of the findings based on the descriptive and statistical hypotheses (Chapters X and XI). This summary will cover the findings based on the following three general objectives:

- I. Determine the needs of the native youth,
- II. Determine the correspondence between native youth needs and non-native youth needs, and
- III. Determine the adequacy of resources needed to meet these needs.

These three general objectives were analyzed in the areas of agency, education, employment, social information, and the corresponding specific objectives (as outlined in Chapter I). Also the demographic characteristics of the native youth sample were described and compared to the non-native youth.

The native youth transients will be treated separately in the demographic, agency, employment and social information categories.

Therefore, a summary of the findings of the characteristics, needs, and perceived adequacy of resources to meet needs of the native students, native transients, and non-native students is presented below under the headings of agency, education, employment and social information. This summary will be followed by a brief conclusion and list of recommendations in Chapter XIII.

SUMMARY OF FINDINGS

A. DESCRIPTIVE DATA ANALYSIS OF STUDENT SAMPLES

1. Demographic Characteristics

The following characteristics were isolated as peculiar to the native youth:

- i) mainly of metis native ancestry; Cree and Algonkian linguistic group,
- ii) behind in school grade and therefore more likely to be older than non-native classmates,
- iii) more likely to select vocational, technical, business or commercial courses rather than matriculation,
- iv) more mobile than non-natives,
- v) more likely to come from other Alberta centres, then Saskatchewan or Manitoba,
- vi) less likely to be living with family, and more likely to be cared for by government means and agencies,
- vii) less likely to come from intact homes,
- viii) more likely to come from larger families, and
- ix) if young native students, they are less likely to speak their native tongue.

2. Agency Information

The analysis was carried out under specific headings, as defined by the research objectives of this area.

Resources Available

The native youth samples have had much more contact with employment and other agencies, than the non-natives. Also, a larger percentage of native youth families, than non-native youth families, have contacted agencies. One of the major reasons for this may be the lower socio-economic

status of the native youth population. In fact the amount of non-native contact with agencies was so minimal, that a meaningful comparison to the native data was not consistently possible.

The major agencies contacted were government agencies, and the major dissatisfaction was stated in terms of Canada Manpower. Half of the contacts with the Department of Indian Affairs were also generally unfavorable. The majority of the contact with government agencies, in terms of looking for employment, resulted in dissatisfaction and no jobs for both samples.

The majority of the contact of native youth families with the Departments of Indian Affairs and Northern Development, and Social Development resulted in satisfaction with the quality and quantity of service. The native youth family contact with other types of agencies was minimal. The majority of the reports stating satisfaction with a non-governmental agency was with the Native Brotherhood Society. These findings would suggest that there are a few agencies that are available to meet the needs of the native population. The need for help seems greater for the natives than the non-natives, which may be a factor of social class. The minimal contact with agencies other than governmental ones may be explained by the fact of lack of knowledge and/or lack of faith in the agencies' ability to help. It is also suggested that the relative newness of the native-run agencies, in part, accounts for the minimal contact with these agencies.

The majority of both native and non-native youth have not contacted agencies, mainly because they have not had the need to. Some other frequently stated reasons for not contacting agencies, as given by native youth, were: no knowledge of services or agencies, parents always went, and/or they heard that agencies and services were not useful.

Adequacy of Resources

The two most frequently stated "most helpful" agencies were the Department of Indian Affairs and Northern Development and the Department of Social Development. The most frequent reason why these agencies were viewed as most helpful was that the respondent "got help". Canada Manpower, Single Men's Hostel, Y.W.C.A., and the Government of the Northwest Territories were also mentioned as most helpful agencies by some respondents. This suggests that if the respondents got help on contact with an agency they were satisfied with this agency's service. The reasons why the respondents did not get help are not clear; it could be because of the agency's inadequacy, uncooperativeness, or the individual respondent's fault.

The most unfavorable experience in terms of helpfulness, and also generally, occurred in contact with Canada Manpower, the Department of Social Development, the Single Men's Hostel and the Department of Indian Affairs and Northern Development. Some 1/3 to 1/2 of the native youth who contacted these agencies would hesitate to go back. Some respondents stated that they would also hesitate to contact the following agencies: McDougall House, Metis Association of Alberta, and the Future Society. The Canada Manpower agency was generally perceived as uncooperative, and one-third of the respondents who contacted the Single Men's Hostel, also viewed it as uncooperative. Some of the respondents who contacted Canada Manpower and the Departments of Social Development and Indian Affairs and Northern Development perceived these agencies as uncooperative because of their native ancestry.

The majority of the native youth and non-native youth (especially those who have contacted agencies) perceive the number of native agencies, the variety of services offered, and the agencies in general as inadequate.

A few of the native youth have contacted the Departments of Social Development and Indian Affairs for help, money and/or counselling. However, it is suggested that considering the results of contacts with these agencies, there is a strong possibility that these needs were not met. There is even a greater possibility that if a native youth has a specific need, he will not even approach an agency for help.

In summary, the native youth have more contact with service agencies than non-native youth, but the experiences of the two samples in terms of having their needs met are equally unfavorable.

3. Education Information

The analysis was carried out in terms of the objectives specified for this area.

Under What Circumstances Native Youth Have Considered Leaving School

The reasons that the two student samples have considered for leaving are not statistically different. However, the two most frequently given reasons by the native youth were:

- i) need to stay home and help, and
- ii) too old for grade level.

Attitudes of Native Youth Toward School Structure, Administration And Fellow Students

Based on the initial descriptive analysis of the individual variables, the native youth seem to be as well adjusted to school in general as the non-native youth (excluding their perceptions of guidance counsellors). The native

students have had more contact with guidance counsellors, and do not view the contact as favorably as the non-native students do. The vast majority of the native students have non-native friends.

The native students seem equally well adjusted to the social situation and the informal interaction in the school milieu, compared to non-native students. Also, both native and non-native students view themselves as being in at least "average" places in their schools. There were no significant differences between the native and non-native youth in their perceptions of their teachers helpfulness and discrimination.

This suggests that the attitudes toward school and adjustment to the school milieu were not found to be descriptively different for the two school samples. However, this conclusion will be expanded in the summary dealing with the tested hypothesis.

Educational Expectations and Goals

The native students seem to have lower educational goals and expectations as compared to the non-native students. The most frequent reason why the chosen grade level is seen as sufficient for the native youth is that it is an "entrance into further education". Therefore, it was suggested that the native youth formulate shorter range goals.

Realization of Perceived Needs and Goals

There were no statistically significant differences between the native and non-native students' liking of school subjects. However, the native students seemed more likely to prefer languages and math; while the non-native students preferred math, and then social studies, art, drama, and physical education.

The majority of the native students do not perceive the subjects they are taking as difficult, and are less likely than the non-native students to perceive the subjects they are taking as difficult.

The majority of the native students perceive the subjects they are taking as useful - in order to find a job, which is the same as the non-native students. This suggests that both samples perceive the subjects they are taking as useful in the applied rather than the academic sense.

In conclusion, the educational system and curriculum seem to be meeting the educational goals and needs of the native and non-native students equally well. The native students seem to prefer different subjects, have trouble with their interaction with counsellors, and consider leaving school because they may have to help at home or they may be too old for their grade level; which defines them as slightly different from the non-native students and therefore possibly possessing different needs. However, the native students also descriptively seem to be well adjusted to the school system and milieu, like their subjects as well, and perceive their subjects as useful and as easy as the non-natives. Even though some of the native students may have special problems and situations because of their socio-economic situation or late start in school, on the average the native and non-native students seem to be equally satisfied and therefore seem to have their educational goals and needs equally met. The question of perceived adjustment to school and the school milieu will be more adequately dealt with below in the summary and interpretation of hypotheses.

4. Employment Information

Again, the analysis used in this section was carried out according to the specific a priori objectives.

The Extent and Character of Native Youth Employment

The non-native students are more likely to be working than the native students (during the school year and during the summer). Both the native and non-native students are most likely to have construction (manual and farm), or

babysitting jobs. However, the native youth are more likely than the non-native youth to have construction jobs, while the non-native youth are more likely than the native youth to have baby-sitting or delivery jobs. The native students work, on the average, more hours per week.

For the summer jobs, the native youth are more likely to have baby-sitting and clerical jobs, while the non-native youth are more likely to have delivery jobs. The native youth also tended to work more hours per week during the summer, but for shorter periods. Most of the unemployed native youth did "nothing during the summer" as compared to the non-native youth who were more likely to have travelled.

The vast majority of both samples like their present jobs, but also desire a better job. It was also found that the non-native youth have more security in their present jobs than the native youth. Also, the native youth seem to hope for a promotion within the same job structure; while the non-native youth are more likely to hope for a better job rather than a promotion.

Reasons for Unemployment

The major reasons for unemployment for the two student samples were the same; i.e. too young, can't find a job, and attending school.

Procedure Used for Finding Jobs in Past

The procedure for finding jobs is mainly the same for the native and non-native students. However, a larger percentage of native students as compared to non-natives have found jobs through friends and want ads. Both school samples tend to rely heavily on more informal means of obtaining part-time jobs, rather than approaching an agency.

Extent of Difficulty in Finding Employment

One-quarter to one-third of both the non-native and native students stated that they have had trouble finding employment. Many of the others are not looking for employment because they are too young, are full-time students, and/or have no need to work.

In conclusion it is suggested that generally the non-native students are just as likely as the native students to have difficulty in having their employment needs realized. More non-native students are working, but this seems to be because they wish to work while the non-natives do not (see reasons for unemployment). The non-native students seem to have more security in the positions they have, and also seem more likely to expect better jobs rather than just promotions within the same job. This may suggest two special problems of the native youth, lower employment security and lower perceived opportunity. When employed, the native youth tend to work longer hours, but also tend to work for shorter periods of time. Therefore the employment needs of native youth seem to be different than the employment needs of the non-native youth because of the different employment situations of the two samples. However, both samples have difficulty in having their specific needs met.

5. Social Information

The structure of the analysis used in this section was determined by the a priori objectives outlined in Chapter I. This same structure is used here to summarize the findings.

Native Student Factor Structure

A component analysis isolated eight orthogonal factors for the native student sample. These factors defined the following areas: i) general adjustment to school, ii) general personality, iii) general integration,

iv) general discrimination and disadvantage, v) general life outlook and adjustment, vi) adjustment to interpersonal interaction in school, vii) conformity to conventional norms and values, and viii) closeness of relationship with family.

The factor structure isolated for the comparative non-native sample was both different from, and similar to the native student factor structure. The factors isolated defined the following areas: i) perception of adequacy of agency resources, ii) relationship with teacher, iii) general life outlook and adjustment, iv) trouble with help from public services (discrimination), v) personal discrimination - persecution, vi) employment discrimination, vii) adjustment to interpersonal interaction in school, viii) trouble with service in public places, ix) liking of school subjects, x) confidence or closeness of relationship, xi) perceived difficulty of school subjects, xii) assimilation, and xiii) personal alienation.

In the comparison of the native and non-native student factor structures, factors peculiar to each student sample were identified. The "employment discrimination" and "perceived difficulty of school subjects" factors were peculiar to the non-native sample.

The "general personality" factor isolated for the native students was not evident for the non-native students. It was suggested that the personality structure of the native students was homogeneous enough to compose a common personality factor, whereas the non-native students were too heterogeneously characterized. The majority of the other general native student factors were also present for the non-native students in the form of a composite of two to four more specific factors. An example is seen in the native student "general adjustment to school" factor which implies the native students' total reaction to the white middle class school milieu, whereas the non-native students do not have

comparable general and total reactions. The non-native students seem to be more likely to react to their surroundings on a greater individual basis, which explains the more specific and individual characteristics.

It was also suggested that alienation may be a part of the native student's general life outlook or adjustment, because the "personal alienation" factor isolated for the non-natives was included in the native students' "general life outlook and adjustment" factor. The greatest similarity in the factor structure of the two samples was the isolation of an "adjustment to interpersonal relations in school" factor for both samples.

Therefore the component analysis suggested that there were specific factors that characterized each student sample, which defined the peculiarity of each sample's characteristics and needs. The factor structure isolated for the native students suggested general factors, and therefore also general reactions to society and their social (including school) milieu. This may be explained in that the native students are not only more homogeneously characterized, but they tend to react to all segments of white society in a general way rather than reacting to separate segments of society. The non-native student component analysis suggested more specific factors, and therefore also specific and individual reactions to segments of their milieu. This suggests that the non-native students are not as homogeneous in characteristics as the native students, and therefore also have more individual needs.

A descriptive analysis of the psychological need structure of the samples found that the native youth were more likely than the non-natives to need independence, recognition from others, and having friends around. The non-native youth significantly cited "emotional support" and "release of tension" as needs that were the most different from needs of the native youth.

In conclusion, it can be seen that the factor structure (defining needs and characteristics) of the native youth students is more general than the non-native students. Therefore, the native student adjustment and reaction to society and their general social milieu is more general and homogeneous, whereas the non-native students react on a more individual basis to specific segments of their milieu. It was also found that the psychological need structures of the two samples were different, with the native youth more likely expressing a need for independence, recognition from others and/or having friends around; while the non-native youth were more likely to express the need for "emotional support" and "release of tension". This suggests that the specific reactions, social characteristics, psychological needs, and general social needs are different for the native youth as compared to the non-native youth.

The Factor Structure of the Student Samples

The following factors were isolated by a component analysis for the combined student samples. Similar factors had been isolated in the separate school sample analyses. These factors defined the variables used in the descriptive and statistical hypotheses, where possible.

- FACTOR 1 - Relationship with teacher
- FACTOR 2 - Trouble with help from public services
- FACTOR 3 - Perception of adequacy of agency resources
- FACTOR 4 - Personal discrimination - persecution
- FACTOR 5 - Closeness of relationship with family
- FACTOR 6 - No trouble with service in public places
- FACTOR 7 - General life outlook and adjustment
- FACTOR 8 - General non-adjustment to school
- FACTOR 9 - Employment discrimination

- FACTOR 10 - Non-conformity to conventional norms
- FACTOR 11 - Family non-intactness
- FACTOR 12 - Ambition
- FACTOR 13 - Perceived discrimination of Edmontonians
- FACTOR 14 - General non-integration
- FACTOR 15 - Personal alienation
- FACTOR 16 - Perceived assimilation
- FACTOR 17 - Liking of school subjects
- FACTOR 18 - Non-adjustment to interpersonal relations in school
- FACTOR 19 - General discrimination and disadvantage
- FACTOR 20 - Perceived opportunity

6. Summary and Interpretation re Descriptive Hypotheses

The perception of adequacy of the resources to meet needs was found to be moderately dependent on adjustment. Specifically the perception of adequacy of agency resources is moderately and negatively related to general non-adjustment to school. This suggests that, along with the fact that the agency and educational resources are perceived as inadequate (by both samples), this is only related to native youth adjustment to school. The perception of inadequacy of resources is related to the unhappiness of the youth (both native and non-native). Specifically, for the native students, the inadequacy of agency resources is related to unhappiness. It cannot be stated what causes what, i.e. whether the perception of inadequacy causes unhappiness or vice versa.

It was also found that the native students who had a close relationship to their families were also more likely to be generally adjusted to society. Considering the characteristics of the native youth who are adjusted to society (i.e. possession of ambition, sense of humor, and desire to achieve recognition) this greater probability of having a close relationship to family further defines these youth as conforming and generally "well adjusted".

No meaningful relationship was found between summer unemployment and perceived adequacy of resources for the native youth, which may suggest that the fact of employment is not important or related to the youths' perception of adequacy of resources to meet their needs.

It was also found for the native youth, that perceived opportunity was negatively related to one type of non-discrimination (i.e. no trouble with service in public places). This suggests that native youth who have low perceived opportunity are nevertheless not likely to feel discriminated against in public places. This also may suggest that for the native youth, this type of discrimination may not be important in terms of effect on perceived opportunity, or vice versa.

Specific personality characteristics of adjusted native and non-native students were also defined. As suggested above, the native youth who have adjusted to society also seem to have integrated into general society, and in the process gained in terms of individuality and initiative. The adjustment to school in general seems to be an attempt to make up for the lack of rewarding interpersonal relations, not necessarily interpersonal relations in school.

The adjustment into the school social milieu seems to be related to positive characteristics, and also possibly integration. This suggests that the adjustment to society seems to preserve the individuality and initiative of the native youth, which suggests integration rather than assimilation.

It was also found that the native youth who were adjusted to school in general were more likely to come from intact homes and those who were not adjusted to school in general were more likely to come from non-intact homes (meaning physically non-intact). This suggests that the factor of intactness of home may help predict adjustment to school for the native students.

The descriptive analysis re native youth adjustment to school suggested that the native students seemed as equally adjusted to school and the school milieu as the non-native students; whereas in the statistical analysis, the native students were portrayed as significantly less likely to be adjusted to school in general and to the interpersonal relations in school. The major reason for this was that the descriptive analysis treated each variable that measured adjustment separately. The component analysis isolated adjustment factors by combining variables that were statistically related for the entire samples and each individual was scored on these factors. The descriptive analysis of each separate variable did not get at the complex relationships defined by the component analysis. The descriptive analysis tends to present simple observed relationships, whereas the component analysis presents underlying latent structure relationships of variance. The summary relationships found in the statistical analysis were not initially apparent in the descriptive analysis. The component analysis (and the testing of the accompanying statistical hypotheses) added clarity by combining the individual variables, and can be seen as a much more sophisticated and reliable analysis. Therefore, much more confidence is placed on the statistical analysis than on the initial descriptive analysis.

7. Summary and Interpretation re Statistical Hypotheses

The finding that the native youth are more likely to perceive themselves as assimilated into society is not what was hypothesized. Since the native youth have lower perceived opportunity and lower adjustment to society than the non-native youth, they may also have acquired a defeatist or "so what" attitude to this situation, and therefore also perceive themselves as more assimilated.

The finding that the native youth were more likely to perceive themselves as discriminated against in interaction with public help services (agencies), in public places (stores, bus depots), in personal interaction, in employment situations, and in interaction with the general public, was in agreement with what was hypothesized. Also, the higher perceived discrimination of the native youth is in correspondence with their low perceived opportunity.

The finding that the native youth had a higher degree of closeness of relationship to parents than the non-native youth suggests that the nuclear family ties are closer for native families than for non-native families. This is in accord with the theoretical expectations outlined in Chapter II.

The finding that the native students have a stronger desire for independence is in correspondence with the literature review. It was suggested earlier (Hawthorn, 1966 - see Chapter III), that native children are brought up to be more independent, which is confirmed here. The native people are reputed to be more likely to have a good sense of humor than non-natives, however, this was not confirmed here.

The finding that native students have a stronger desire for recognition may be related to their strong desire for independence. The higher degree of acceptance of self is not what was hypothesized. It was suggested (Hawthorn, Wintrob) that the major problem of native youth was their search for identity, and an identity conflict. However, the results suggest that the native youth have less trouble accepting themselves than the non-natives. This suggests that that theorized identity conflict and search for identity may not be peculiar to native youth, but may apply to all youth.

The finding that there were no significant differences in the amount of ambition between the two samples, contradicts Hawthorn's suggestion that lower perceived opportunity will result in diminished motivation. The amount of ambition (desire to master some skill) was equally high for both samples.

These findings suggest the different social, psychological and emotional characteristics of the native youth, and confirm General Hypothesis I.

The findings on the perceived adequacy of resources suggest that the educational needs of the native youth are being met equally as well as the needs of the non-native youth. The needs to be realized by service agencies were just as likely to be perceived as not met by the non-natives as the native students. This suggests that if the native youth have needs that are not being met, it is just as likely that if the non-native students have similar needs, these needs are also not being met. The inadequacy of service agencies is not relevant to the native youth situation alone, but is more important to them individually because the native youth have had more contact with service agencies (Hypothesis 9 above).

The finding that the native youth more frequently gave "the need to stay home and help" and "the characteristic of being too old for their grade level" responses as reasons for considering leaving school, defines the plight of the native student. The native students are more likely to be of lower socio-economic status, and therefore, more likely to be required to help out at home. Also, the native students are more likely to start school late and drop behind their classmates, because of their cultural and social disadvantage in the white middle-class school system.

The finding that the summer and part-time employment of the two samples was not the same, with the native youth less likely to be employed, suggests that either the native students are less employable or have less desire to work. However, when the respondents were asked in Chapter VIII (page 137, Table 8:7) why they were unemployed, the two samples gave the same reasons: too young and/or attending school. Therefore, this would suggest that the native students are less likely to be employed during school or in the summer, because they have less desire to work.

The finding that the native students have had more contact with service agencies than the non-native students, suggests that the native students have had more need to contact agencies. This may be explained in part by their suggested lower socio-economic status. When the respondents were asked why they had not contacted agencies (Chapter VI, Table 6:15, p. 92), significantly more non-natives gave "no need to" as a reason than native students.

The finding that the native students have significantly lower and/or shorter range educational goals than the non-native students suggest that this may also be related to the native students' lower perceived opportunity. The native students may hold the same long-range educational goals as the non-native students, but realistically they expect to achieve more easily accessible goals. This is directly related to the idea of perceived discrepancy between goals and means, and also the self-fulfilling prophecy. The native student may be perceiving his important others (teachers, parents, peers) as not expecting him to go beyond grade 10 or 12, and therefore he himself does not expect to go beyond these grades either (Cooley, Videbeck, Hackler, etc.).¹

¹ See Chapter II.

B. NATIVE TRANSIENT YOUTH

1. Demographic Characteristics

The following list defines the demographic characteristics of the native transient youth:

- a) The majority of the native transients are in the age bracket of 20 to 25 years old.
- b) The majority of the native transients have come from other Alberta centres, then Saskatchewan and Manitoba.
- c) The transients are usually living with friends, in an institution or home, in a hostel, or alone. Only one-third are living with parents or relatives.
- d) Less than 10% of the transients are from an intact home (containing both a mother and a father).
- e) The majority of the native transient youth were Metis, of Cree and mixed Cree ancestry and of Algonkian linguistic group.
- f) The majority of the native transients speak their native tongue. This may be explained by the fact that these native youth have come from less urbanized centers (many possibly from reserves), where the people are more likely to speak their native tongue.

2. Agency Information

The majority (approximately two-thirds) of the native transient sample have contacted employment agencies, while approximately only 10% of the native students have contacted employment agencies.

Three-quarters of the transient contacts have been with Canada Manpower. This suggests that of the transients who have contacted an employment agency

for a job, a strong majority have contacted Canada Manpower, a small number have contacted the Indian Affairs Department, while only a minimal number have contacted other agencies. The other results of native transient contact with agencies is the same as that reported for native students in the section above, i.e. in summary, majorally unsatisfactory. This unsatisfactory result on contact with service agencies becomes even more relevant for the native transients than for the native students, because of the transients much greater contact with agencies.

3. Employment Information

The descriptive data analysis suggested that the transients were most likely to be unemployed. If a native transient was employed, he was most likely to be employed part time, more mobile than average in terms of length of time at a job, and an unskilled employee. The vast majority of the transients like their present jobs but also desire a better job. The major reasons for unemployment were: i) can't find a job, ii) lack of education, training or skill, iii) discrimination and prejudice, and/or iv) no transportation. These reasons are completely different from those given by the school samples, and the main reason for this was that the transients were older and therefore more employable.

The native transients were more likely than the student samples to approach agencies, look at want ads in the paper, and/or look around for jobs themselves. This can be explained in that the native transients were also more likely than the student samples to be searching for full-time permanent jobs.

The majority of the native transients have trouble finding employment, and therefore, view their employment needs as not being met. It is important to note that the employment needs of the native transients are different from the native students. Since the native transients are more likely to be looking for employment and they are equally as dissatisfied as the students in not having their needs met, the employment needs of the native transients are more important than the students' needs.

4. Social Information

Four specific types of discrimination were isolated for the native transient sample by a component analysis. The factors were: i) general social discrimination, ii) discrimination in terms of help from public services, iii) discrimination in personal interaction, and iv) discrimination in bars.

This analysis suggested that discrimination is a very relevant concern for the native transients in terms of the interaction in all spheres of their lives.

Implications for Future Research

Some very important issues remain inconclusive and unclarified. For example, one of the important concepts that has been minimally researched here is native youth identity and identity crisis. Erikson (1968) presents a model to explain youth identity crisis across cultures, which would be relevant here.¹ Therefore, one of the numerous questions that has arisen from this research project, and should be researched in the future, is native youth identity crisis.

1 Erikson, Erik H., 1968, Identity: Youth and Crisis, New York: W.W. Norton & Co. Inc.

The survey items used as the data base have been reduced to relevant factors, and this suggests implications for testing the applicability of these factors on other samples. Many concepts have been clarified; for example the general areas of discrimination and adjustment have been specified and hopefully clarified.

Also, many important learning experiences have arisen during the progress of this research project (actually an extensive pilot project), which would facilitate any further research on the native youth or other minorities.

CHAPTER XIII

IMPLICATIONS AND RECOMMENDATIONS

INTRODUCTION

This chapter contains a list of recommendations offered by the researcher as possible general resolutions to the situation defined. These recommendations are directly derived from the data analysis. Considering the limitations of the study and therefore, the possible misinterpretation of the findings, these recommendations are suggested as guidelines for the policy and decision makers. Very broadly, it is suggested that there are native youth characteristics and needs specific to them. However, the resources present to meet these needs are as inadequate for the total youth population as they are for the native youth population. Therefore, in recommending changes in the system for native youth, some of these changes apply not only to the native youth, but also the entire youth population of Edmonton.

Based on the clear conclusion that the native youth have specific identifiable characteristics and corresponding needs, it is generally recommended that these characteristics and accompanying needs be finally realized in planning programs to meet these needs. It is also generally recommended that if new resources are set up to meet the identified needs of the native youth (or a re-organization of present resources is implemented), that these resources be facilitated through native resources and personnel. This differentiates the recommended action of resources implemented by the native people themselves, from the action of implementing resources by non-natives for natives. The specific recommendations based on the agency, education, employment and social (including psychological) areas are presented below.

Recommendations Related to Agency Data

According to both recorded youth experience and youth perceptions, it can clearly and definitely be concluded that the majority of the service agencies existing to help the youth in the city are not adequate. The native youth have had much more contact with these agencies, especially native transients, and therefore also seem more likely to need the services offered by these agencies. It is also important to note that the problems of inadequate agency resources and unsatisfactory results on contact with agencies, are especially relevant to the native transients. A list of the agencies that the native youth perceive as inadequate and have had unfavorable experiences with is presented in Chapter VI, along with a list of favorably perceived agencies. Some suggestions of why these agencies are perceived as inadequate and unfavorable are also presented. On this basis, it is suggested that the inadequacy of agency resources is most relevant to the native youth.

Therefore, it is recommended that the agencies helping the native youth, and youth in general, should be closely examined in terms of their objectives and operating policies. It is possible that these agencies were not meant to help youth in the areas they have sought help, and in this case it is recommended that a new organization of existing agencies or the setting up of a totally new agency or agencies may be necessary.

It became evident throughout the research, that the native youth were more likely to contact well-known government agencies not set up to deal with native youth problems and needs, which have been demonstrated to be different in certain aspects from non-native youth needs. *Therefore, it is also recommended that more adequate information about existing agencies and the help they offer should be readily available to all youth.*

This may define the function of a central office, which could develop, organize, advertise and supervise agencies to meet the needs of the native (and non-native) youth. *It is also recommended that competent native resources be more adequately implemented into the service agency program for native youth.*

Since it was found that there is a moderate, but existant, relationship (not necessarily causal) between adjustment to school and perception of adequacy of agency resources; and happiness and perception of adequacy of agency resources, this further defines the importance of having adequate resources available.

Recommendations Related to Education Data

According to the data analysis carried out in this area, it can be clearly seen that some native youth have particular problems related to their education. These problems arise because of the native students' possibly later start in school, higher perceived discrimination, lower perceived opportunity, and other conditions that could cause them to be or become disadvantaged in the school system. In fact, part of the problem that native youth have within the school system may be due to their lower socio-economic status and possible accompanying disadvantages. This of course also effects their adjustment to the general school system and school milieu, which was found to be lower for the native students (based on the statistical analysis of factors). However, most of the native students also like their subjects, don't perceive their subjects as difficult, and enjoy the school interaction (based on the descriptive analysis).¹ Therefore, this suggests that some native students

1 As mentioned above, the descriptive analysis presents the simple observable relationships, whereas the component and statistical analysis present the latent structure relationships that clarify the complexity of the data.

have special educational needs that are a result of their individual characteristics and circumstances. However, there is no evidence that the present educational curriculum and system cannot handle and resolve these special problems and needs.

Therefore, in order to help cope with this situation, it is recommended that special attention should be given to the needs (and related aptitudes) of all students within the present educational system, and especially to the native youth. The fact that the native youth have lower perceived opportunity, lower adjustment to school and higher perceived discrimination, suggests that in order for these youth to gain the most out of their educational program, they must be made more susceptible and ready to succeed.

It is also recommended then that an educational program should be selected to fit the needs, goals and capabilities of the native youth. Once the program has been selected, the students should be made to feel that they will succeed and will attain what they strive for.

Again, since the major problems with the native youth educational situation are their low perceived opportunity and short-range goals, this may suggest an extensive counselling (or similarly oriented) service connected with the education of native youth. *Considering the unsatisfactory reaction of the native youth to their contact with school counsellors, it is also recommended that the present counselling program in the schools be carefully analyzed and modified to help the native youth more adequately, possibly implementing native resources in this program.*

As suggested in Chapter X (pp. 181-182) adjustment to school in general is negatively related to possession of close interpersonal relations. However, no relationship was found between closeness of relationship to family and general non-adjustment to school (Chapter X, pp. 181-182). It is suggested that in some cases the school and home may have been working in opposition to each other as socializing forces. It was also found that the adjustment to school in general and physical intactness of home (presence of both a mother and father), were related. Therefore, this finding also points to the importance of the home situation and characteristics as affecting youth adjustment to school. The finding that the closeness of relationship to parents of the natives was higher than the closeness of relationship to parents of the non-native youth, even compounds the importance of the family in the native youth success and adjustment to school. *Therefore, it is recommended that one method to help resolve this situation could be a program giving special attention to having the home and education systems working in correspondence with each other.* This suggests an extensive educational program, integrating the parents and school system, which may again be coordinated and supervised by a central organization. In this manner both the parents and school will be made to realize the importance of their mutual cooperation in the education of native youth.

Recommendations Related to Employment Data

Even though the native and non-native students can be seen to have equal difficulty finding employment, it is clearly evident from the data analysis that the native youth have peculiar employment characteristics:

less likely to be working, slightly different student occupations, low socio-economic transient occupations, less security on the job, less perceived opportunity of getting a better job rather than a promotion, less employment stability (shorter stay at one job), and less desire to be working (for the native students as compared to the non-native students). Therefore, it is recommended that one possible way that the employment needs of all the Edmonton youth may be met is by a special centrally organized youth placement agency, with special attention given to native youth by part of the agency.

The native transients have the most trouble finding employment, partly because they are looking for more permanent jobs than the students and are not well qualified to be hired on a permanent basis. The major reasons why the transients are unemployed also suggest the need for a more centrally organized and advertized youth employment agency and a re-training or education centre. Therefore, it is recommended that a re-training and re-education program should be set up in combination with the youth placement agency to help satisfy some of the employment needs of native students and transients, and similarly characterized recipients. It is also recommended that the re-training and re-education program could contain a counselling function that can deal with the low perceived opportunity of native youth; for without a change in attitude and perception, education and training would be of little utility. Of course, in order for the perceived opportunity of the native youth to change, the circumstances that influence this perception must also change. Therefore, it is also suggested that a re-education program for the employers and also the general public (in terms of native youth capabilities and goals) could help resolve the problem.

Recommendations Related to Social Data

The differentiating characteristics of the native youth sample were:

- i) higher perceived discrimination: in employment, in public places, in contact with public help services, in interpersonal relations, and in interaction with the general public (and also possible higher sensitivity)
- ii) lower perceived opportunity
- iii) higher general non-adjustment to school and non-adjustment to interpersonal relations in school
- iv) more general reactions to society, and thus more homogeneous (versus individual) characteristics than the non-native population
- v) greater perceived assimilation into society
- vi) greater desire for independence
- vii) greater desire for recognition from others
- viii) greater desire to have friends around
- ix) higher degree of close relationships to family (parents)
- x) higher degree of self-acceptance
- xi) less likely to come from intact homes, and more likely to come from larger families, and
- xii) higher residence mobility

It was suggested that many of the areas in which the needs of the native youth are not adequately realized, the needs of the non-native youth are also not adequately realized. However, it can be seen that the characteristics and corresponding need structure within these areas are different for the native students and transients, from the non-natives. *Therefore, it is recommended that special attention should be given to the native youth characteristics that differentiate them from non-native youth, in setting up programmes and services to meet their needs.*

The finding that the native youth have less need for "emotional support" and "release of tension" than the non-native youth suggests that the personal help the native youth may need is of a different kind than that needed by the non-native youth. The native youth are more likely to perceive their needs as desire for independence, recognition from others, and having friends around. These findings are in direct correspondence with the findings that native youth are more likely to have lower perceived opportunity and higher perceived discrimination than non-natives. The socio-economic, ethnic, and cultural situation of the native youth seems to have formed a native personality and mentality that is in opposition to the general societal system. It may be the conflict between the native youth situation and their perception of their surroundings that produces the unfavorable characteristics of low perceived opportunity, non-adjustment, etc.. *Therefore, it is recommended that an educational and action program be implemented to fit the native youth into a compatible and desirable position within society.*

IN SUMMARY, IT IS NOT ONLY THE NATIVE YOUTH PROGRAMS, RESOURCES, AND MILIEU THAT MUST CHANGE, BUT A CORRESPONDING CHANGE MUST ALSO BE ACCOMPANIED IN THE NATIVE YOUTH THEMSELVES.

A P P E N D I C E S

APPENDIX A

Appendix A

Re Native Youth Sampling Procedure (conducted and writted by Jane Leat)

A sample of 300 treaty and non-treaty natives was randomly and proportionately selected from the total population of students of Native Canadian Ancestry, (N = 662), residing in Edmonton in May, 1970.

I ACTUAL SAMPLING PROCEDURE:

During Phase I of the study, the city was divided into eight tracts to facilitate a more accurate census. These tracts were retained to become the sample sections for phase II.

The proportion of the entire sample which resided in each sample section was calculated.¹ Next, the proportions by ethnicity, (i.e. Treaty or Metis), in each section were determined, and the number of individuals which should be sampled when N = 300 was calculated for each respective group. When the number of Metis and Treaty individuals which should be sampled was determined, each section was further stratified into the proportions which should be male or female. Accordingly, the males and females were further stratified proportionately on the basis of age, (under 20 yrs., and over 19 years);² and, or the basis of the type of educational institute they attended, (public school, separate school, or post-secondary institute).

Below is an example to illustrate and clarify the stratification.

1 Note that section of residence was the criterion rather than section of school attended.

2 This specifies the age stratification as:

under 20 years = 19 and under
over 19 years = 20 and over

A. METIS N = 21		B. TREATY N = 12	
I. MALE N = 9	II. FEMALE N = 12	I. MALE N = 3	II. FEMALE N = 9
a. Under 20 yrs. N = 9	a. Under 20 yrs. N = 11	a. Under 20 yrs. N = 3	a. Under 20 yrs. N = 8
b. Over 19 yrs. N = 0	b. Over 19 yrs. N = 1	b. Over 19 yrs. N = 1	Either male or female N = 1
c. public school & under 20 yrs. N = 2	c. public school & under 20 yrs. N = 3	c. public school & under 20 yrs. N = 1	c. public school & under 20 yrs. N = 3
d. separate sch. & under 20 yrs. N = 6	d. separate sch. & under 20 yrs. N = 8	d. separate sch. & under 20 yrs. N = 2	d. separate sch. & under 20 yrs. N = 5
e. post-secondary N = 1	e. post-secondary & over 20 yrs. N = 1	e. post secondary if possible, either male or female. N = 1	and over 20 yrs. N = 1
Total N = 9	Total N = 12	Total N = 3	Total N = 9

Summary of Above Table:

A. Section I calculated on N = 300 for the total sample.

TREATY:

- (1) Sample 1 TREATY male under 20 years in Public School.
- (2) Sample 3 TREATY females under 20 years in Public School.
- (3) Sample 2 TREATY males under 20 years in Separate School.
- (4) Sample 5 TREATY females under 20 years in Separate School.

- * (5) Sample 1 TREATY female or male over 19 years in whatever type of ed.
institute he is found.

*If the Treaty individual over 19 years is not the same individual as the one in the post-secondary institute, then sample both individuals so as not to eliminate the post-secondary individual from our sample.

B. METIS:

- (1) Sample 2 METIS males under 20 years in Public School.
- (2) Sample 3 METIS females under 20 years in Public School.
- (3) Sample 6 METIS males under 20 years in Separate Schools.
- (4) Sample 8 METIS females under 20 years in Separate Schools.

(5) Sample 1 METIS female or male over 19 years.

(6) Sample 1 METIS female or male in post-secondary education.

possibly this
could be the
same individual

II Exceptions or Limitations in Sample Calculations:

The sampling was intentionally biased toward three groups: students over nineteen years of age, students attending post-secondary institutions, and students of Eskimo ancestry. The logic behind this decision was that by sampling proportionately, these groups could possibly be eliminated from the sample since there were few individuals in these categories. It was suggested that the data gained by sampling as many of these individuals as possible would outweigh the contaminating effect of sampling all available respondents.

III Actual Sample Selection:

Following the calculations for the precise number of individuals to be sampled in each stratification, four tables were constructed for each sample section. One table contained a random listing of the Treaty male sub-sample, while its counterpart contained a random listing of the Metis male sub-sample. Accordingly, one table contained the Treaty female sub-sample, and its counterpart contained the Metis female sub-sample. Each table was divided into the same stratifications for which the numbers to be sampled had been determined. These were:

TREATY SUB-SAMPLE

TREATY MALES Under 20 yrs In Public Schools	TREATY MALES Under 20 yrs In Separate Schools	TREATY MALES Under 20 yrs In Post-Sec. Institutions	TREATY MALES Over 19 yrs In Public Schools	TREATY MALES Over 19 yrs In Separate Schools	TREATY MALES Over 19 yrs In Post-Sec. Institutions
NAMES:	NAMES:	NAMES:	NAMES:	NAMES:	NAMES:
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Similarly, three other tables - as previously described, were constructed for each section.

The selection of names to be sampled was conducted by initially referring to the number of individuals required in a particular category, followed by a tabulation of the number of individuals in that category altogether. The number required was then divided into the total number to determine which individuals would be sampled. Eg. If 15 individuals were listed in a particular category, and 5 individuals were required for the sample, we chose $\left(\frac{15}{5} = 3\right)$ every third individual.¹ Again, all individuals over nineteen or in post-secondary institutions were selected.

¹ A source of contamination which must be noted resulted from interviewers occasionally interviewing individuals on the sample list who were not selected, simply because they were available.

APPENDIX B

APPENDIX B

REASONS FOR REDUCED SIZE OF NATIVE STUDENT SAMPLE

The following list presents some of the major reasons why only 143 of the native youth initially sampled (300 native students) were actually included in the sample:

i) Many students left the city around the middle of June, while the interviewing did not get under way until the beginning of June. By the end of June when all the students were out of school, only four of the eight sections had over half of the quota sample complete.

ii) The interviewing staff were late getting started, and once in the field, were poorly organized and not totally convinced of the worth or usefulness of what they were doing.

iii) Some of the initial sample were excluded because they were retarded and/or institutionalized (N = around 6).

iv) The native sample was noticeably more mobile than the non-natives which may have in part accounted for the inability of the interviewers to contact them.

INTERVIEW SCHEDULE FOR NATIVE YOUTH

SURVEY OF NATIVE YOUTH

Interviewer _____

Time _____

Person interviewed _____

1. Are you presently attending school? Full-time _____ Part-time _____
 - (a) What is the name of your school? _____
(include vocational schools)
 - (b) What is your course of study? _____
 - (c) When will you finish (graduate) your course? _____
(month) (year)
2. Are you a resident of the city? Yes _____ No _____
 - (a) How long have you lived here? 1 year or less _____
1-3 years _____
3-5 years _____
5-10 years _____
over 10 years _____
 - (b) Where did you live before? (Town, Province) _____
 - (c) Are you a Treaty Indian? Yes _____ No _____
 - (d) Are you Metis? Yes _____ No _____
 - i. What is your ancestry? _____
 - (e) Do you speak your native tongue at home? Yes _____ No _____
3. A. Who are you living with?
 - (a) your family _____
 - (i) mother _____ (ii) father _____ (iii) both _____
 - (b) your relatives _____
 - (c) your friends _____
 - (d) alone _____
 - (e) institution or home _____
 - (f) other _____
 - (i) details _____
- B. How many children are there in your family?

0-2 _____	2-3 _____	4-6 _____	7-9 _____	10+ _____
-----------	-----------	-----------	-----------	-----------
- C. How many children are living at home?

0-2 _____	2-3 _____	4-6 _____	7-9 _____	10+ _____
-----------	-----------	-----------	-----------	-----------

D. Is there anyone living with you who is not a member of the family?

Yes _____ No _____

E. How many people are there in your household who are over 12 and under 25?

1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6-10 _____

F. Is there anyone in your house who is in the 12-25 age group and who is not attending school? (If YES try to get names and ages)

(i) name _____ age _____

(ii) name _____ age _____

(iii) name _____ age _____

G. Is this person (or persons) employed?

If YES

(i) What is his occupation? _____

If NO

(ii) What type of work does he usually do? _____

4. Student Employment Section (TO BE ASKED OF STUDENTS ONLY)

A. Are you currently holding a part-time job? Yes _____ No _____

(i) (If so) what do you do? _____

(ii) How many hours a week do you work? _____

(iii) During what hours of the day do you work? _____

(a) week days only _____

(b) week ends only _____

B. Did you have a job last summer? Yes _____ No _____

(i) (If so) what did you do? _____

(ii) How many hours a week did you work? _____

(iii) How many months did the job last? _____ months

(iv) If you did not have a job last summer, what did you do?

5. Non-Student Employment Section (TO BE ASKED OF THOSE NOT ATTENDING SCHOOL ONLY)

A. Are you currently holding a job?

(i) part time Yes _____ No _____

(ii) full-time Yes _____ No _____

(iii) how many hours a week do you work? _____ hours

(iv) what do you do? _____

(v) how long have you had this job? _____

(vi) how many jobs have you had in the last two years? (number) _____

(vii) what is the average number of weeks you worked in the past year? _____

6. General Employment (TO BE ASKED OF EVERYONE)

A. (IF PRESENTLY EMPLOYED, ASK ...)

	Very Much (high)	Ave. _____	Very little (low)
(i) how do you like your present job?	_____	_____	_____
(ii) what are your chances for promotion?	_____	_____	_____
(iii) how are your chances of getting a better job?	_____	_____	_____
(iv) what are your chances of being fired or laid off?	_____	_____	_____
(v) how much would you like to get a better job?	_____	_____	_____

B. (IF PRESENTLY UNEMPLOYED, ASK ...)

	YES _____	NO _____
(i) is this because you can't find a job?	_____	_____
(ii) is this because you are a married woman and do not need to?	_____	_____
(iii) is this because you don't want the jobs you can find?	_____	_____
(add "the job available are not suitable")	_____	_____
(iv) is this because you lack education, training, or a specific skill?	_____	_____
(v) is this because you have to stay home and help out?	_____	_____
(vi) is this because there is descrimination and prejudice against you?	_____	_____
(vii) is this because you are too young?	_____	_____
(viii) is this because you have no transportation?	_____	_____
(ix) other reasons? (describe below)	_____	_____

- | | <u>YES</u> | <u>NO</u> |
|---|------------|-----------|
| 7. In the past, how have you found jobs? | | |
| A. talk to friends for help or leads? | _____ | _____ |
| B. Read the 'want-ads' in the newspaper? | _____ | _____ |
| C. Just go out and look around? | _____ | _____ |
| D. Talk to the school counsellor? | _____ | _____ |
| E. Have you ever contacted an agency to assist you in finding employment? | _____ | _____ |

If YES ASK: WHICH ONES?

<u>NAME:</u>	<u>WHAT HAPPENED?</u>
(1)	(1)
(2)	(2)
(3)	(3)
(4)	(4)

Interviewer: (prompt if necessary by suggesting Canada Manpower, the union on 6th Avenue and 104 Street, other manpower centres, etc.)

8. Has your family ever approached or required a service from an agency? (or agencies?) Yes _____ No _____

A. Was it an agency existing solely for treaty Indians? Yes _____ No _____
(NAMES: _____)

B. Was it a government agency? Yes _____ No _____
(NAMES: _____)

C. Was it a charitable organization? Yes _____ No _____
(NAMES: _____)

D. Was it a social service agency? Yes _____ No _____
(NAMES: _____)

E. Other agencies consulted? Yes _____ No _____
(NAMES: _____)

- F. Were you satisfied with the services which they provided for you?
(INTERVIEWER: ask this question for each one they listed above)

	<u>NAME OF AGENCY</u>	<u>SATISFIED</u>	<u>DIS-SATISFIED</u>
(i)	_____	_____	_____
(ii)	_____	_____	_____
(iii)	_____	_____	_____
(iv)	_____	_____	_____

- G. Do you feel that they supplied all the services that they are reported to supply? (again, ask this question for each agency)

	<u>NAME OF AGENCY</u>	<u>SATISFIED</u>	<u>DIS-SATISFIED</u>
(i)	_____	_____	_____
(ii)	_____	_____	_____
(iii)	_____	_____	_____
(iv)	_____	_____	_____

- H. What was their attitude toward you at each agency? (ask separately for each one contacted)
(check opposite space)

	<u>NAME OF AGENCY</u>	<u>very co- operative</u>	<u>somewhat helpful</u>	<u>unco-operative</u>
(i)	_____	_____	_____	_____
(ii)	_____	_____	_____	_____
(iii)	_____	_____	_____	_____

- I. (Do you have any) additional comments on services? (their comments)

9. Have you ever approached an agency yourself for a particular service (for you?)

Yes. _____ No. _____

A. IF YES:

- (i) what was the most helpful agency with which you have every been in touch?

NAME: _____
(If same agency as family contacted include regardless)

REASON: (what did you like about it?) _____

- (ii) What was the least helpful agency you have ever consulted?

NAME: _____

REASON: _____

(probe: unco-operative? unable to give service you needed?)

- (iii) Would you hesitate to contact an agency again if you needed assistance? Yes _____ Some of them _____ No _____

If yes or some of them, which ones?

NAMES: (a) _____
(b) _____
(c) _____
(d) _____

- (iv) Do you think agencies established to serve native people are too few? YES _____ NO _____
- (v) Do you think agencies established to serve native people cater to the needs of the native people? YES _____ NO _____
- (vi) Do you think there is too little variety in the types of services they offer? YES _____ NO _____
- (vii) Do you think agencies existing presently to assist native people are inadequate? YES _____ NO _____

B. IF NO:

- (i) why have you never contact an agency?

(read after natives)

- (a) you have heard they are not useful? YES _____ NO _____
- (b) you have never had any need to? YES _____ NO _____
- (c) you don't have any knowledge as to what services are available? YES _____ NO _____
- (d) other reasons: (list) _____

- (ii) Do you think agencies which exist to help native people are too few? YES _____ NO _____
- (iii) Do you think agencies which exist to serve native people cater to their needs? YES _____ NO _____
- (iv) Do you think there is too little variety in the types of services they offer? YES _____ NO _____
- (v) Do you think agencies established to assist native people are inadequate? YES _____ NO _____

C. ASK ALL RESPONDENTS:

Did you say you had you ever approached an agency because you required a service from it? (repeat question) YES _____ NO _____

IF YES:

(a) What was the attitude of this or these agencies toward you?

	<u>NAME OF AGENCY</u>	<u>very co- operative</u>	<u>somewhat helpful</u>	<u>unco-operative</u>
(i)	_____	_____	_____	_____
(ii)	_____	_____	_____	_____
(iii)	_____	_____	_____	_____
(iv)	_____	_____	_____	_____

(b) Would you say they were less co-operative because of your ethnic background?

	<u>NAME OF AGENCY</u>	<u>YES</u>	<u>NO</u>
(i)	_____	_____	_____
(ii)	_____	_____	_____
(iii)	_____	_____	_____

(c) Do you have any friends who have had unfavourable experiences with an agency? Yes _____ No _____

(d) Do you know the reason for this unpleasant experience?

Yes _____ No _____

(details if offered): _____

(e) Do you know which agency it was? YES _____ NO _____

NAME: _____

D. Have you ever participated in any activities sponsored by your community league? YES _____ NO _____

(i) would you like to see more community sponsored programs? YES _____ NO _____

(ii) are you satisfied with community league functions as they presently exist? YES _____ NO _____

Attitudes:

(To be asked of all respondents)

- | | | |
|---|-----|----|
| 1. How do you like the people in Edmonton? | YES | NO |
| 2. Do you find Edmontonians friendly? | YES | NO |
| 3. Do you find Edmontonians unfriendly? | YES | NO |
| 4. Do they try to understand you? | YES | NO |
| 5. Do they try to help you when you need their help? | YES | NO |
| 6. Do they want to do things with you? | YES | NO |
| 7. Do they avoid you? | YES | NO |
| 8. Have you had trouble finding housing? | YES | NO |
| 9. Have you had trouble finding employment? | YES | NO |
| 10. Do you get hassled in the street? | YES | NO |
| by men? | YES | NO |
| by people? | YES | NO |
| 11. Do you have trouble getting services in the bars? | YES | NO |
| in the stores? | YES | NO |
| from the welfare? | YES | NO |
| in the bus depots? | YES | NO |
| 12. Do you find it easy to locate places for leisure or recreation? | YES | NO |
| 13. Are the police friendly in their treatment? | YES | NO |
| 14. Do you go to the police for help? | YES | NO |
| 15. Do you have confidence in the police? | YES | NO |
| 16. Have you ever had any trouble with the police? | YES | NO |
| 17. Why do you think many native people resort to drinking? | | |
| <hr/> | | |
| <hr/> | | |
| 18. Do you go to the Indian Affairs Branch | | |
| (a) when you need money? | YES | NO |
| (b) when you need counselling? | YES | NO |
| (c) when you need help? | YES | NO |

19. Do you go to Social Development

(a) when you need money? YES _____ NO _____

(b) when you need counselling? YES _____ NO _____

(c) when you need help? YES _____ NO _____

20. (a) Where do you go when you have emotional troubles (problems)?

(b) Where do you go when you are lonely?

(c) Where do you go when you are frustrated?

(d) Where do you go when you are in trouble?

(e) Where do you go when you are broke?

(#) Where do you go when you need advice?

21. What services would you like to see introduced in Edmonton for the natives?

22. Do you want to integrate into the way of life of the people in Edmonton?

YES _____ NO _____

23. Do you prefer to live (in Edmonton) like all other people do?

YES _____ NO _____

24. Do you want to keep to your traditional way of life even in Edmonton?

YES _____ NO _____

25. Is life better in the city of Edmonton than on the Reserve?

YES _____ NO _____

26. Would you like to learn and practice your native traditions in the City?

YES _____ NO _____

27. Do you think the native organizations have done much for the native people?

YES _____ NO _____

28. Have you ever approached the Native Associations for counselling?

YES _____ NO _____

29. Do you hope to achieve independence (to become free) from outside help? (self-supporting)

YES _____ NO _____

30. (a) Do you hope to achieve recognition from others? YES _____ NO _____

(b) If Yes, how do you hope to achieve this? (details if possible)

1. Do you have any further comments to make?

Yes _____ No _____

or other comments

2. Do you have any further comments to make?

3. Do you think that if you had more information you would change your answer?

Yes _____ No _____

a. If you have more information, would you change your answer?

or other comments

4. Do you have any further comments to make?

Yes _____ No _____

5. If you have more information, would you change your answer?

1	11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100	11	11	11
2	11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100	11	11	11
3	11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100	11	11	11
4	11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100	11	11	11
5	11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100	11	11	11
6	11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100	11	11	11

- (i) Do you usually conform to rules and regulations of the society in which you live? YES _____ NO _____

Attitudes towards the School:

(to be asked of those presently in school)

1. Have you ever thought of leaving school? YES _____ NO _____

(a) Was it because you had to stay home and help? YES _____ NO _____

(b) Was it because of sickness in the family? YES _____ NO _____

(c) Was it because of the absence of a key member member in the family? (give details) YES _____ NO _____

(Father's absence ... boy stays home)

(Mother's absence ... girl stays home)

(d) Was it because of a death in the family? YES _____ NO _____

(e) Was it because of financial need? (personal) YES _____ NO _____

(family) YES _____ NO _____

(f) Was it because you feel that you are too old for the grade level that you are in? YES _____ NO _____

- i. give details for any reasons you are at this grade level.

(g) Was it suggested to you by the school? YES _____ NO _____

i. the administration? YES _____ NO _____

ii. the guidance counsellor? YES _____ NO _____

iii. your teachers? YES _____ NO _____

iv. by your friends? YES _____ NO _____

v. by other students? YES _____ NO _____

(h) Was it suggested to you by your parents? YES _____ NO _____

IF YES, would you know why? (reasons)

(i) was it because of repeated suggestions by your family?

YES _____ NO _____

2. (a) How do you 'fit' in the school? (view yourself in the school)

(b) How do you view the administration? (principal and vice-principal)

(c) How do you view the guidance counsellors?

(d) How do you view your teachers?

(e) How do you view the other students?

3. (a) Do you like the subjects you are taking? YES _____ NO _____
IF YES, give details

IF NO, give details (where possible)

- (b) Do you think that the subjects you are taking
in school will be useful to you? YES _____ NO _____
(give details if possible)

- (c) Do you find the subjects you are presently
taking difficult? YES _____ NO _____
(give details if possible)

- (d) Which subjects do you find more difficult than
the others? (identify by subject)

4. (a) What grade level do you hope to achieve? _____ grade

(b) Why do you find that level of learning sufficient?

(c) Do you have a relative who has gone to university and has graduated? YES _____ NO _____

(d) Do you have a relative who has gone to a technical school (NAIT) and has succeeded? YES _____ NO _____

(e) Do you have any friends who have gone to University or NAIT? YES _____ NO _____

5. ^a Which subject do you like the best? _____

b. Which subject or subjects do you like the least? _____

6. (a) Do you have non-native friends at school? YES _____ NO _____

(b) Do you have any trouble making friends with the students at school? YES _____ NO _____

(c) Do you think that other students like you? YES _____ NO _____

(d) Do you like the other students? YES _____ NO _____

(e) Do you think that the teachers like you? YES _____ NO _____

(f) Do you like the teachers? YES _____ NO _____

(g) Are the teachers helpful? YES _____ NO _____

(h) Do the teachers sometimes give examples that humiliate you? YES _____ NO _____

(i) Do the teachers punish you unnecessarily? YES _____ NO _____

7. Do you feel happy most of the time? YES _____ NO _____

8. Are you unhappy most of the time? YES _____ NO _____

IF YES, give details if possible

APPENDIX D

APPENDIX D

NON-NATIVE YOUTH SAMPLING

Since the need for a non-native control sample was realized at such a late date, efficiency in terms of time and work were prime considerations in the selection and testing of a control sample. Therefore, the original native youth interview schedule was modified into a questionnaire that was to be administered to groups of students. It was also decided to use entire classrooms instead of individuals from classes in certain schools. This was done to save on time, initial complexity of sampling and efficiency of questionnaire administration.

In the native youth sample, 129 high school students were interviewed. The students were classified by school of attendance, location (by city section) of school, type of school (high school, junior high and elementary, separate or public), sex, age and grade. Using this information as a guide, a comparable non-native sample was selected by school and grade. It was decided that sixteen schools with varying grades, would present the most adequately equivalent non-native sample to the native sample.

The school board superintendents of these schools were contacted by the Deputy Minister's office, for permission to continue the native youth study by making available one class in each school designated. A record of this letter and related replies are presented in Appendix I. The school boards assured us of their cooperation and the researcher in turn made arrangements to administer the questionnaires. Over 400 questionnaires were filled out in this part of the survey.

Of these 400 respondents, 190 were chosen to be included in the control sample. The criteria of selecting these respondents were:

- 1) non-native ancestry
- 2) completeness of questionnaire
- 3) approximately equal number of males and females
- 4) as close an approximation to the native youth sample in terms of location of school, type of school and grade.

Table D-1 below presents a comparison between the two samples by criterion characteristics. A total correspondence was not possible on every criterion, but the best possible fit was attempted. Some classrooms had a higher percentage of incomplete questionnaires than others, which offset the planned selection.

Appendix E presents the schools, location by section of city, school address, and grade of the selected non-native control sample.

APPENDIX D

TABLE D-1

COMPARABILITY OF NATIVE VERSUS NON-NATIVE
SCHOOL SAMPLES

<u>CRITERION</u>	<u>NATIVE SAMPLE</u>		<u>NON-NATIVE SAMPLE</u>	
Location of School Section	N*	%	N	%
1	28	21.7	46	24.2
2	25	19.4	13	6.8
3	21	16.3	24	12.6
4	1	.8	---	----
5	17	13.2	21	11.0
6	15	11.6	36	18.9
7	6	4.7	11	5.8
8	14	10.9	39	20.5
TOTAL N	127		190	
<hr/>				
Type of School				
Public High & Jr. High	12	9.3	21	11.0
Public Elementary	9	6.8	12	6.3
Sep. & Public Elementary & Jr. High	74	57.4	106	55.8
Sep. High & Jr. High	27	20.9	31	16.3
Separate Elementary	7	5.4	20	10.5
TOTAL N	129		190	
<hr/>				
Grade				
5 - 6	36	27.9	61	32.1
7 - 8	47	36.4	62	32.6
9	13	10.1	30	15.8
10 - 11	10	7.8	25	13.2
12	10	7.8	12	6.3
TOTAL N	116		190	

* The total N's for this column vary because of the fluctuating number of people who answered these items.

APPENDIX E

APPENDIX E

SCHOOL CLASSES SELECTED FOR NON-NATIVE CONTROL SAMPLE

Separate Schools

<u>School</u>	<u>Address</u>	<u>Section of City</u>	<u>Class/Grade</u>
Holy Cross	15120 - 104 Avenue	8	9
Mount Carmel	10524 - 76 Avenue	6	7
Sacred Heart	9624 - 108 Avenue	3	6
St. Andrew	11342 - 127 Street	7	8
St. Basil	10210 - 115 Avenue	2	7
St. Catherine	10915 - 110 Street	5	6
St. Edmund	11712 - 130 Avenue	1	8
O'Leary	8760 - 132 Avenue	1	10
St. Francis Xavier	9250 - 163 Street	8	11
St. Joseph's	10826 - 109 Street	5	12

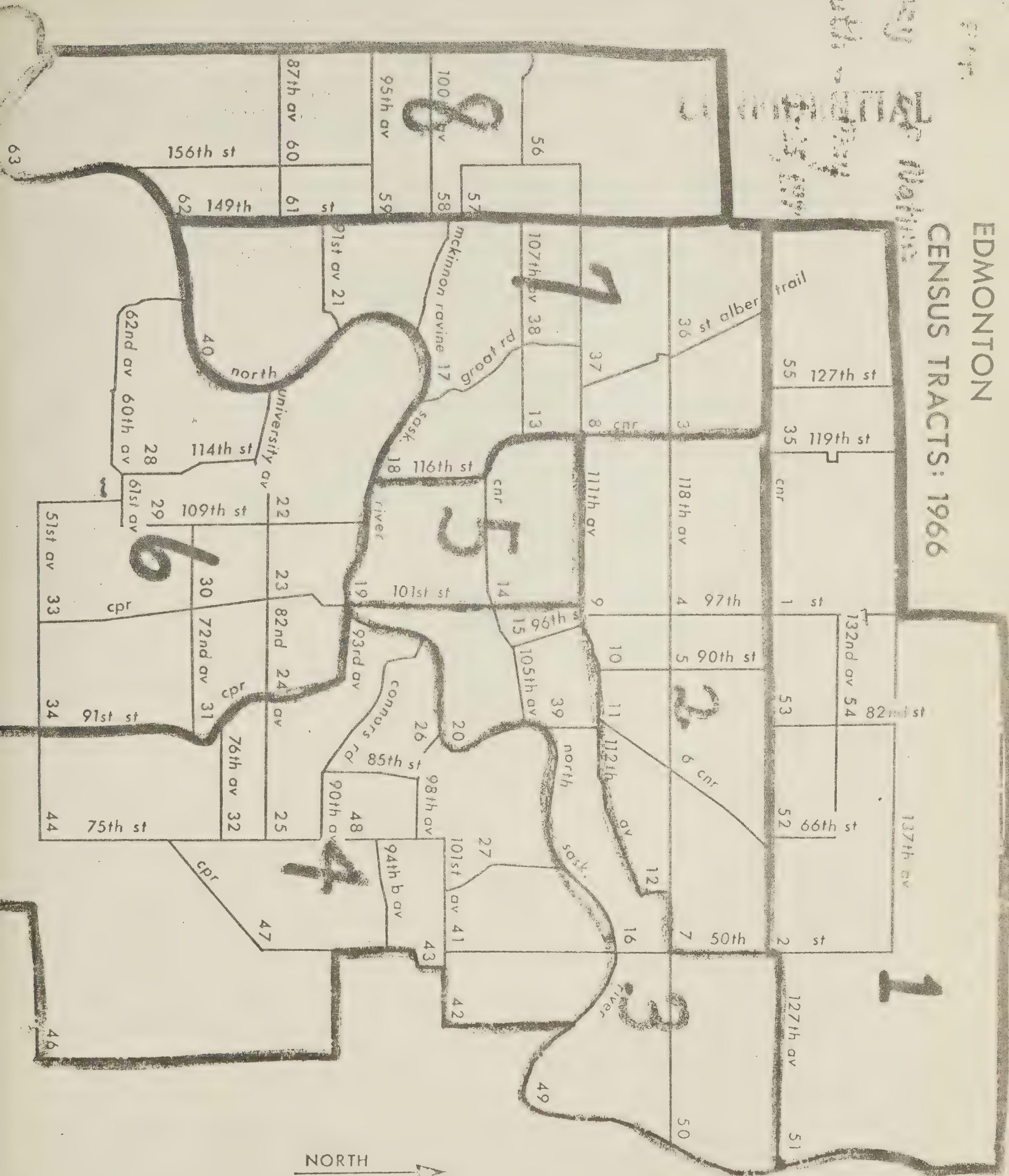
Public Schools

<u>School</u>	<u>Address</u>	<u>Section of City</u>	<u>Class/Grade</u>
Alex Taylor	9321 - Jasper Avenue	3	5
Eastwood	12023 - 81 Street.	2	6
Garneau	10925 - 87 Avenue	6	6
McKernon	11330 - 76 Avenue	6	9
Wellington Jr. High	13160 - 127 Street	1	8
Jasper Place Composite	163 Street & 92 Avenue	8	12

APPENDIX F

SECTIONS OF EDMONTON FOR SURVEY OF NATIVE YOUTH

EDMONTON CENSUS TRACTS: 1966



APPENDIX G

APPENDIX G

INSTRUCTIONS TO NON-NATIVE CONTROL SAMPLE

EDMONTON YOUTH STUDY

AFTER HAND-OUT QUESTIONNAIRES:

The purpose of this study is to learn more about the work, education and general life experience and needs of young people in Edmonton.

This questionnaire is not a test and there are no right or wrong answers.

There are two very important additions that you have to make that are not asked for on the questionnaire. On the upper right hand corner of the top page, please write whether you are male or female, followed by a slash (-) and then your age at your last birthday.

You have the rest of the period to complete the questionnaire. Do not rush - be sure to answer each question, but also work steadily and don't spend too much time on any one question.

When you are finished, please stay in your seat. You can work on your own work if you wish. Please be quiet so as not to disturb the others around who have not finished.

If you have a question please raise your hand. If a question does not apply to you - write in "N/A".

WHEN TIME UP:

Our time is now up. Check over your paper to be sure you have answered all of the questions.

COLLECT QUESTIONNAIRES

APPENDIX H

APPENDIX H
QUESTIONNAIRE FOR NON-NATIVE CONTROL SAMPLE
SURVEY OF EDMONTON YOUTH

1. Are you presently attending school? Full-time _____ Part-time _____
- (a) What is the name of your school? _____
(include vocational schools)
- (b) What is your course of study? _____
- (c) When will you finish (graduate) your course? _____
(month) (year)
- (d) What diploma or degree will you receive when you graduate? _____
2. Are you a resident of the city? Yes _____ No _____
- (a) How long have you lived here? 1 year or less _____
1-3 years _____
3-5 years _____
5-10 years _____
over 10 years _____
- (b) Where did you live before? (Town, Province) _____
- (c) Are you of North American Native Ancestry (Indian, Eskimo, Metis, etc.)?
Yes _____ No _____
3. A. Who are you living with?
- (a) your family _____
(i) mother _____ (ii) father _____ (iii) both _____
- (b) your relatives _____
- (c) your friends _____
- (d) alone _____
- (e) institution or home _____
- (f) other _____
(i) details _____
- B. How many children are there in your family?
0 - 1 _____ 2 - 3 _____ 4 - 6 _____ 7 - 9 _____ 10+ _____
- C. How many children are living at home?
0 - 1 _____ 2 - 3 _____ 4 - 6 _____ 7 - 9 _____ 10+ _____
- D. Is there anyone living with you who is not a member of the family? Yes _____ NO _____
- E. How many people are there in your household who are over 12 and under 25?
1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 - 10 _____
- F. Is there anyone in your house who is in the 12-25 age group and who is not attending school? (If YES try to get names and ages)
- (i) name _____ age _____
- (ii) name _____ age _____
- (iii) name _____ age _____

G. Is this person (or persons) employed?

If YES

(i) What is his occupation? _____

If NO

(ii) What type of work does he usually do? _____

4. A. Are you currently holding a part-time job? Yes _____ No _____

IF NO PROCEED TO QUESTION B BELOW

(i) (If so) what do you do? _____

(ii) How many hours a week do you work? _____

(iii) During What hours of the day do you work? _____

(a) week days only _____

(b) week ends only _____

B. Did you have a job last summer? Yes _____ No _____

IF NO PROCEED TO QUESTION 5.

(i) (If so) what did you do? _____

(ii) How many hours a week did you work? _____

(iii) How many months did the job last? _____ months

(iv) If you did not have a job last summer, what did you do?

IF PRESENTLY UNEMPLOYED PROCEED TO QUESTION B BELOW

5. A.	Very Much (high)	Ave.	Very Little (low)
(i) how do you like your present job?	_____	_____	_____
(ii) what are your chances for promotion?	_____	_____	_____
(iii) how are your chances of getting a better job?	_____	_____	_____
(iv) what are your chances of being fired or laid off?	_____	_____	_____
(v) how much would you like to get a better job?	_____	_____	_____

IF PRESENTLY EMPLOYED SKIP TO QUESTION 6 BELOW

B.	<u>YES</u>	<u>NO</u>
(i) is this because you can't find a job?	_____	_____
(ii) is this because you are a married woman and do not need to?	_____	_____
(iii) is this because you don't want the jobs you can find?	_____	_____
(Add "the job available are not suitable")	_____	_____

- | | <u>YES</u> | <u>NO</u> |
|---|------------|-----------|
| (iv) is this because you lack education, training, or a specific skill? | _____ | _____ |
| (v) is this because you have to stay home and help out? | _____ | _____ |
| (vi) is this because there is descrimination and prejudice against you? | _____ | _____ |
| (vii) is this because you are too young? | _____ | _____ |
| (viii) is this because you have no transportation? | _____ | _____ |
| (ix) other reasons? (describe below) | | |

- | | <u>YES</u> | <u>NO</u> |
|--|------------|-----------|
| 6. In the past, how have you found jobs? | | |
| A. Talk to friends for help or leads? | _____ | _____ |
| B. Read the 'want-ads' in the newspaper? | _____ | _____ |
| C. Just go out and look around? | _____ | _____ |
| D. Talk to the school counsellor? | _____ | _____ |
| E. Have you ever contacted an agency to assist you in finding employment (eg. Manpower, Unemployment Insurance Office, etc.) | | |

IF YES, WHICH ONES?

IF NO, SKIP TO QUESTION 7

NAME:

WHAT HAPPENED?

(1)

(1)

(2)

(2)

(3)

(3)

(4)

(4)

7. Has your family ever approached or required a service from an agency?
(or agencies?) YES _____ NO _____

IF NO, SKIP TO QUESTION 8

- A. Was it a government agency?

Yes _____ No _____

(NAMES: _____

- B. Was it a charitable organization?

Yes _____ No _____

(NAMES: _____

C. Was it a social service agency?

Yes _____ No _____

(NAMES: _____

D. Other agencies consulted?

Yes _____ No _____

(NAMES: _____

E. Were you satisfied with the services which the agencies provided for you and your family? (ANSWER FOR EACH AGENCY YOU LISTED ABOVE)

<u>Name of Agency</u>	<u>SATISFIED</u>	<u>DIS-SATISFIED</u>
(i) _____	_____	_____
(ii) _____	_____	_____
(iii) _____	_____	_____
(iv) _____	_____	_____

F. Do you feel that the agencies supplied all the services that they are reported to supply? (AGAIN, ANSWER FOR EACH AGENCY YOU LISTED ABOVE)

<u>Name of Agency</u>	<u>SATISFIED</u>	<u>DIS-SATISFIED</u>
(i) _____	_____	_____
(ii) _____	_____	_____
(iii) _____	_____	_____
(iv) _____	_____	_____

G. What were the agencies' attitudes toward your family? (ANSWER FOR EACH AGENCY YOU LISTED ABOVE FROM i to iv)

<u>Name of Agency</u>	<u>Very Co-operative</u>	<u>Somewhat Helpful</u>	<u>Unco-operative</u>
(i) _____	_____	_____	_____
(ii) _____	_____	_____	_____
(iii) _____	_____	_____	_____
(iv) _____	_____	_____	_____

H. Do you have any additional comments on these agencies' services?

8. Have you ever approached an agency for a particular service for yourself? Yes _____ No _____

IF NO: SKIP TO QUESTION B BELOW

A. IF YES:

- (i) what was the most helpful agency with which you have ever been in touch?

NAME: _____

(If same agency as family contacted include regardless)

REASON: (what did you like about it?) _____

- (ii) What was the least helpful agency you have ever consulted?

NAME: _____

REASON: (examples: unco-operative, unable to give service you needed, etc.)

- (iii) Would you hesitate to contact an agency again if you needed assistance?

Yes _____ Some of them _____ No _____

If yes or some of them, which ones?

NAMES: (a) _____

(b) _____

(c) _____

(d) _____

- (iv) Do you think agencies established to serve people in Edmonton are too few? Yes _____ No _____

- (v) Do you think agencies established to serve people in Edmonton cater to their needs? Yes _____ No _____

- (vi) Do you think there is too little variety in the types of services the agencies in Edmonton offer? Yes _____ No _____

- (vii) Do you think the agencies existing presently in Edmonton to assist people are inadequate? Yes _____ No _____

IF YOU RESPONDED YES TO QUESTION 8 ABOVE, SKIP TO QUESTION 9 BELOW

B. IF NO:

- (i) why have you never contacted an agency?

(a) you have heard they are not useful? Yes _____ No _____

(b) you have never had any need to? Yes _____ No _____

(c) you don't have any knowledge as to what services are available? Yes _____ No _____

(d) other reasons: (list) _____

- (ii) Do you think agencies which exist to help people in Edmonton are too few? Yes _____ No _____

- (iii) Do you think agencies which exist to serve people in Edmonton cater to their needs? Yes _____ No _____

(iv) Do you think there is too little variety in the types of services the agencies in Edmonton offer? Yes _____ No _____

(v) Do you think the agencies established to assist people in Edmonton are inadequate? Yes _____ No _____

9. Did you say you had ever approached an agency because you required a service from it? Yes _____ No _____

If NO, skip to Question 10.

If YES:

(a) What was the attitude of this or these agencies toward you?

	<u>Name of Agency</u>	<u>Very Co-operative</u>	<u>Somewhat Helpful</u>	<u>Unco-operative</u>
(i)	_____	_____	_____	_____
(ii)	_____	_____	_____	_____
(iii)	_____	_____	_____	_____
(iv)	_____	_____	_____	_____

(b) Would you say they were less co-operative because of your ethnic, racial or religious background?

	<u>Name of Agency</u>	<u>Yes</u>	<u>No</u>
(i)	_____	_____	_____
(ii)	_____	_____	_____
(iii)	_____	_____	_____
(iv)	_____	_____	_____

(c) Do you have any friends who have had unfavourable experiences with an agency? Yes _____ No _____

(d) Do you know the reason for this unpleasant experience? Yes _____ No _____

(details if offered): _____

(e) Do you know which agency it was? Yes _____ No _____

NAME: _____

10. Have you ever participated in any activities sponsored by your community league? Yes _____ No _____

(i) would you like to see more community sponsored programs? Yes _____ No _____

(ii) are you satisfied with community league functions as they presently exist? Yes _____ No _____

Attitudes:

- | | | |
|---|-----------|----------|
| 1. Do you like the people in Edmonton? | YES _____ | NO _____ |
| 2. Do you find Edmontonians friendly? | YES _____ | NO _____ |
| 3. Do you find Edmontonians unfriendly? | YES _____ | NO _____ |
| 4. Do they try to understand you? | YES _____ | NO _____ |
| 5. Do they try to help you when you need their help? | YES _____ | NO _____ |
| 6. Do they want to do things with you? | YES _____ | NO _____ |
| 7. Do they avoid you? | YES _____ | NO _____ |
| 8. Have you had trouble finding housing? | YES _____ | NO _____ |
| 9. Have you had trouble finding employment? | YES _____ | NO _____ |
| 10. Do you get hassled in the street? | YES _____ | NO _____ |
| by men? | YES _____ | NO _____ |
| by people? | YES _____ | NO _____ |
| 11. Do you have trouble getting services in the bars? | YES _____ | NO _____ |
| in the stores? | YES _____ | NO _____ |
| from the welfare? | YES _____ | NO _____ |
| in the bus depots? | YES _____ | NO _____ |
| 12. Do you find it easy to locate places for leisure or recreation? | YES _____ | NO _____ |
| 13. Are the police friendly in their treatment? | YES _____ | NO _____ |
| 14. Do you go to the police for help? | YES _____ | NO _____ |
| 15. Do you have confidence in the police? | YES _____ | NO _____ |
| 16. Have you ever had any trouble with the police? | YES _____ | NO _____ |
| 17. Why do you think people resort to drinking? | | |

18. Do you go to the Social Development Department (welfare)

- | | | |
|--------------------------------|-----------|----------|
| (a) when you need money? | YES _____ | NO _____ |
| (b) when you need counselling? | YES _____ | NO _____ |
| (c) when you need help? | YES _____ | NO _____ |

19. (a) Where do you go when you have emotional troubles (problems)?

(b) Where do you go when you are lonely?

(c) Where do you go when you are frustrated?

(d) Where do you go when you are in trouble?

(e) Where do you go when you are broke?

(f) Where do you go when you need advice?

20. What services for people would you like to see introduced in Edmonton?

21. Do you want to integrate into the way of life of the people in Edmonton?

YES _____ NO _____

22. Do you prefer to live (in Edmonton) like all other people do?

YES _____ NO _____

23. Do you want to keep a traditional (religious or ethnic: German, Ukranian, Jewish, etc.) way of life?

YES _____ NO _____

24. Would you like to learn and practice your ethnic or religious traditions in Edmonton?

YES _____ NO _____

25. Do you hope to achieve independence (to become free) from outside help? (self-supporting)

YES _____ NO _____

26. (a) Do you hope to achieve recognition from others?

YES _____ NO _____

(b) If yes, how do you hope to achieve this? (Give details if possible)

(c) Do you hope to master some skill? (become proficient)?

YES _____ NO _____

If Yes, identify

If No, reasons or details (if possible)

27. Do you think that if you want to master some skill that you must master it?

YES _____ NO _____

eg. A painter must paint
A teacher must teach etc.

(details if possible)

28. (a) Do you usually accept yourself as you see yourself?

YES _____ NO _____

(b) Do you look at life as a series of problems to be solved or that you are constantly pressured by society?

- (c) Do you need to be alone once in a while? YES _____ NO _____
- (d) Do you always want friends around? YES _____ NO _____
- (e) Do you feel that there are some "basic goods in life" which you like? YES _____ NO _____
- (f) Have you ever developed some close interpersonal relationships with other people? (very good and close friends) YES _____ NO _____
- (g) Do you usually try to distinguish between a way to do something and the result of it? YES _____ NO _____
- (h) Do you usually have a good sense of humour? YES _____ NO _____
- (i) Do you usually conform to rules and regulations of the society in which you live? YES _____ NO _____

Attitudes Towards the School:

(To be asked of those presently in school)

1. Have you ever thought of leaving school? YES _____ NO _____
If NO, proceed to Question 2 below.
- (a) Was it because you had to stay home and help? YES _____ NO _____
- (b) Was it because of sickness in the family? YES _____ NO _____
- (c) Was it because of the absence of a key member in the family? (give details) YES _____ NO _____
(Father's absence boy stays home)
(Mother's absence girl stays home)
- (d) Was it because of a death in the family? YES _____ NO _____
- (e) Was it because of financial need? (personal) YES _____ NO _____
(family) YES _____ NO _____
- (f) Was it because you feel that you are too old for the grade level that you are in? YES _____ NO _____

i) Give details for any reasons you are at this grade level.

- (g) Was it suggested to you by the school? YES _____ NO _____
- i) the administration? YES _____ NO _____
- ii) the guidance counsellor? YES _____ NO _____
- iii) your teachers? YES _____ NO _____
- iv) by your friends? YES _____ NO _____
- v) by other students? YES _____ NO _____
- (h) Was it suggested to you by your parents? YES _____ NO _____
- If Yes, Do you know why? (reasons)

(i) Was it because of repeated suggestions by your family? YES _____ NO _____

2. (a) How do you 'fit' in the school? (view yourself in the school)

(b) How do you view the administration? (principal and vice-principal)

(c) How do you view the guidance counsellors?

(d) How do you view your teachers?

(e) How do you view the other students?

3. (a) Do you like the subjects you are taking? YES _____ NO _____

If Yes, give details

If No, give details (where possible)

- (b) Do you think that the subjects you are taking in school will be useful to you? (give details if possible) YES _____ NO _____

- (c) Do you find the subjects you are presently taking difficult? (give details if possible) YES _____ NO _____

- (d) Which subjects do you find more difficult than the others? (identify by subject)

4. (a) What grade level do you hope to achieve? _____ grade

- (b) Why do you find that level of learning sufficient?

- (c) Do you have a relative who has gone to university and has graduated? YES _____ NO _____

- (d) Do you have a relative who has gone to a technical school (NAIT) and has succeeded? YES _____ NO _____

- (e) Do you have any friends who have gone to University or NAIT? YES _____ NO _____

5. (a) Which subject do you like the best? _____

- (b) Which subject or subjects do you like the least? _____

6. (a) Do you have friends at school? YES _____ NO _____

- (b) Do you have any trouble making friends with the students at school? YES _____ NO _____

- (c) Do you think that other students like you? YES _____ NO _____

- (d) Do you like the other students? YES _____ NO _____

- (e) Do you think that the teachers like you? YES _____ NO _____
- (f) Do you like the teachers? YES _____ NO _____
- (g) Are the teachers helpful? YES _____ NO _____
- (h) Do the teachers sometimes give examples that
humiliate you? YES _____ NO _____
- (i) Do the teachers punish you unnecessarily? YES _____ NO _____
7. Do you feel happy most of the time? YES _____ NO _____
8. Are you unhappy most of the time? YES _____ NO _____

If Yes, give details if possible

APPENDIX I

LETTER TO SCHOOL SUPERINTENDENTS

AND RELATED REPLIES

January 6th, 1971

School Board Superintendents

9807 - 106th Street
Edmonton, Alberta

Dear School Board Superintendent:

On April 27th, 1970 the Honourable R. C. Clark in his capacity as Minister of Youth at that time wrote you indicating our interest in undertaking a research project to determine the needs of native youth in the city of Edmonton. You were kind enough on this occasion to give us your complete support and as a result I am pleased to be able to report that the study has proceeded most satisfactorily.

The first phase of our study concerning native youth in the city is now complete. However, at this point our Director of Research advises me that we could add significantly to the study by gathering comparable data for a control (non-native) sample. His feeling is that we may find by adding this dimension to the study that many of the needs of native youth are no different from those of others in their peer group. If this is the case then it would not be realistic to attempt to meet needs with native youth only.

I am advised that one of the most efficient methods of obtaining a non-native control sample is to select a stratified school sample from both separate and public schools in Edmonton. It is suggested that one class be used in each of ten specific separate schools (including Grades 5 - 12) and one class be used in each of six public schools (covering Grades 5, 6, 8, 9 and 12) in Edmonton. This sample would then be comparable with the native youth school sample according to the section of Edmonton in which the school is located and also the grade.

/ 2

January 6th, 1971

I concur with our researchers that it would be highly desirable to continue the study as indicated above. In this connection then I would again ask your co-operation. Basically what we shall require is authorization to contact a number of schools in which we would administer the same questions used on the native youth interview schedules, slightly modified to fit a questionnaire format and a non-native population. Not more than one class period will be required for this. The schools we would be interested in contacting are those as per the attached sheet.

Please advise if it will be in order for us to proceed further with this study as indicated above. If so, we shall make contact with the various school principals.

Yours truly,

C. L. USHER
Deputy Minister of Youth

CLU/cmf

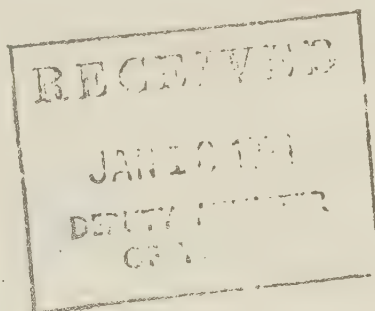


Edmonton Separate School District

EDUCATIONAL AND ADMINISTRATIVE CENTRE

9807 - 106 STREET, EDMONTON 14, ALBERTA — TELEPHONE (403) 429-7631

January 15, 1971



Mr C L Usher
Deputy Minister of Youth
Alberta Department of Youth
C N Tower
Edmonton 15, Alberta

Dear Mr Usher:

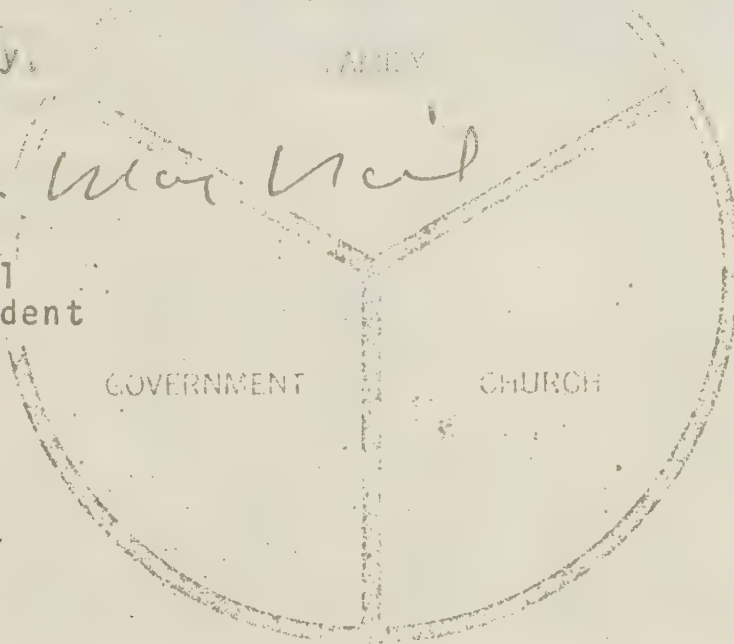
I have checked your letter of January 6, regarding the control study which you would like to do with the non-native sample of students in the schools of Edmonton. We are in agreement that this study should go forward and would suggest that the persons conducting the samples work through the principals of the schools concerned and carefully indicate to them the purpose.

Yours truly,

H. A. MacNeil

H A MacNeil
Superintendent

HAM/do



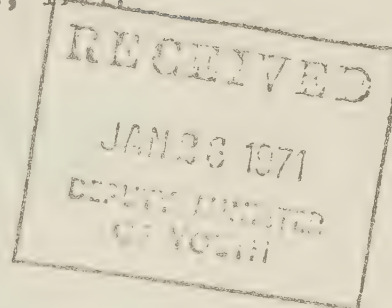


EDMONTON PUBLIC SCHOOLS
0010-107A Avenue., EDMONTON 17. ALBERTA.
Telephone : 403 - 429-5621

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Mr. J. H. Finlay
Associate Superintendent
Mr. A. F. H. H. H.
Associate Superintendent

January 22, 1971.



Mr. C.L. Usher,
Deputy Minister of Youth,
Alberta Department of Youth,
CN Tower,
EDMONTON 15, Alberta.

Dear Mr. Usher:

Your letter of January 6th to Dr. Jones, in which you outlined your wish to undertake a research project in certain of our schools, was passed to our department of R.D. & I. for processing and action. Our office has contacted the principals of the schools which you requested and they have agreed to discuss the undertaking of the project in their respective schools. It should be appreciated that in any such study, final approval rests with these principals.

Therefore your Director of Research should contact the following principals:

J.D. Marles	Wellington School	455-8884
A.W. Frost	Eastwood School	477-2352
S.R. Ramsankar	Alex Taylor School	422-6240
M.B. Shalka	Garneau School	433-1390
A. Lust	McKernan School	439-8127
E. Meyer	Jasper Place C.H. School	484-5581

in order to ensure their final approval is forthcoming and to make the necessary arrangements. Copies of this letter and of your request to Dr. Jones will be sent to these principals in anticipation of their being contacted by your Department.

Should there be other aspects of the study in which you would like us to assist you, please do not hesitate to call our office.

Yours sincerely,

Earl Mansfield

E.A. Mansfield, Ph.D.,
DIRECTOR - EDUCATIONAL RESEARCH.

EAM/ab

c.c. Dr. Rolland W. Jones, J.D. Marles, A.W. Frost,
S.R. Ramsankar, M.B. Shalka, A. Lust, E. Meyer, N. Marchak

APPENDIX J

APPENDIX J

A.B. Hollingshead - Yale University

SEVEN SOCIO-ECONOMIC SCALE POSITIONS

1. Higher Executives of Large Concerns, Proprietors and Major Professionals

- a. High Executives: (Value of corporation \$500,000 and above as rated by Dunn and Bradstreet).

Bank Presidents, Vice-Presidents, and Assistant Vice-Presidents
Businesses - Directors, Presidents, Vice-Presidents, Assistant Vice-Presidents,
Executive Secretaries, Research Directors, Treasurers
High School Principals and School Superintendents

- b. Proprietors: (Value over \$125,000 by Dunn and Bradstreet).

Brokers Contractors Dairy Owners Farmers Lumber Dealers

- c. Major Professionals:

Accountants (C.P.A.)	Judges (Superior Courts)
Actuaries	Lawyers
Agronomists	Metallurgists
Architects	Military, Comm. Officers - Major and
Artists, Portrait	Above, Officials of the Executive
Astronomers	Branch of Government, Federal,
Auditors	State, Local, E.G. Mayor, City
Bacteriologists	Manager, City Plan Director,
Chemical Engineers	Internal Revenue Directors
Chemists	Nutritionist (with Ph. D.)
Clergymen (Professionally Trained)	Physicians
Dentists	Physicists, Research
Economists	Psychologists, Practicing
Editors of Newspapers	Symphony Conductor
Engineers (College Graduates)	Teachers - University, College
Foresters	Veterinarians (Veterinary Surgeons)
Geologists	

2. Business Managers, Proprietors of Medium Sized Businesses, and Lesser Professionals

- a. Business Managers in Large Concerns (Value \$500,000 plus)

Advertising Directors	Manufacturer's Representatives
Branch Managers	Office Managers
Brokerage Salesmen	Personnel Managers
Directors of Purchasing	Police Chief: Sheriff
District Managers	Postmaster
Executive Assistants	Production Managers
Assistant Editors	Publicity Director for University
Gov't. Officials, minor, eg. Internal	Sales Engineers
Revenue Agents D.A.	Sales Managers, National Concerns
Farm Managers	Store Managers

INDEX OF SOCIAL POSITION

b. Proprietors of Medium Businesses (Value \$50,000 - \$125,000)

Advertising	Farm Owners
Clothing Store	Poultry Business
Contractors	Real Estate Brokers
Express Company	Rug Business
Fruits, Wholesale	Theatre
Jewelers	Hardware Store

c. Lesser Professionals

Accountants (not C.P.A.)	Military Comm. Officers - Lts., Captains
Chiropodists	Musicians (Symphony Orchestra)
Correction Officers	Nurses
Director of Community House	Opticians
Engineers (not College Grad)	Pharmacists
Finance Writers	Program Directors, radio and T.V.
Health Educators	Public Health Officers (M.P.H.)
Labor Relations Consultants	Research Assistants, Univ. (full time)
Librarians	Social Workers
	Teachers, Elementary and High School

3. Administrative Personnel, Owners Small Businesses, and Minor Professionals

a. Administrative Personnel

Advertising Agents	Sales Representatives and Salesmen of
Chief Clerks	heavy goods, e.g. autos and major
Credit Managers	electrical appliances
Insurance Agents	Section Heads, Federal, State and Local
Managers, Departments	Government Offices
Managers, Finance Companies	Section Heads, Large Businesses and
Passenger Agents - R.R.	Industries
Private Secretaries	Service Managers
Purchasing Agents	Shop Managers
Traffic Managers	Store Managers (Chain)
Grain Elevator Operators	

b. Small Business Owners (\$10,000 - \$50,000)

Art Gallery	Convalescent Homes
Auto Accessories	Decorating
Awnings	Dog Supplies
Bakery	Dry Goods
Beauty Shop	Engraving Businesses
Boatyard	Food
Brokerage, Insurance	Finance Company, local
Car Dealers	Fire Extinguishers
Cigarette Machines	5¢ and 10¢ stores
Cleaning Shops	Florist
Clothing	Food Equipment
Coal Businesses	Food Products
Contracting Businesses	Foundry

INDEX OF SOCIAL POSITION

3. b. Small Business Owners (cont.)

Funeral Directors	Poultry
Furniture	Real Estate
Garage	Records and Radios
Gas Station	Restaurants
Glassware	Roofing Contractor
Grocery-General	Shoe
Hotel Proprietors	Signs
Jewelry	Tavern
Machine Brokers	Taxi Company
Manufacturing	Tire Shop
Monuments	Trucking
Music	Trucks and Tractors
Package Store (liquor)	Upholstery
Paint Contracting	Wholesale Outlets
Plumbing	Window Shades

c. Semi-Professionals

Actors and Showmen	Photographers
Professional Athletes	Physio-therapists
Army M. Sgt., Navy, C.P.O.	Piano Teachers
Artists, Commercials	Pilots, not major airlines
Appraisers (Estimators)	Publicity and Public Relations
Clergymen (not professionally trained)	Radio, T.V. Announcers and Engineers
Concern Managers	Reporters, Court
Deputy Sheriffs	Reporters, Newspapers
Interior Decorators	Surveyors
Interpretors, Court	Title Searchers
Laboratory Assistants	Tool Designers
Landscape Planners	Travel Agents
Morticians	Yard Masters, R.R.
Oral Hygienists	Dispatchers, R.R.
Recreation Therapists	Grain Buyer - mechanical engineer
Merchant	Mechanical Engineer

d. Farmers and Ranchers

Farm or Ranch Owners (\$20,000 - \$50,000)

4. Clerical and Sales Workers, Technicians, and Owners of Small Businesses (Value under \$10,000)

a. Clerical and Sales Workers

Bank Clerks and Tellers	Post Office Clerks
Bill Collectors	Route Managers
Bookkeepers	Sales Clerk e.g. Sales of sporting goods, light goods, etc.
Business Machine Operators, Offices	Sergeants and Petty Officers, Military Serv.
Claims Examiners	Shipping Clerks
Clerical or Stenographic	Supervisors, Utilities, Factories
Conductors, R.R.	Tour Foreman, Post Office
Employment Interviewers	Toll Station, Supervisors
Factory Storekeepers	Warehouse Clerks
Factory Supervisors	Ticket Agents for R.R.
Salesmen	
Livestock Dealer	
Stockkeeper	

INDEX OF SOCIAL POSITION

b. Technicians

Dental Technicians	Operators, P.B.X.
Draftsmen	Proofreaders
Driving Teachers	Safety Supervisors
Expeditor, Factory	Supervisors of Maintenance
Experimental Tester	Technical Assistants
Instructors, Telephone Co., Factory	Telephone Co. Supervisors and PBX Sup.
Inspectors, Weights, Sanitary	Timekeepers
Inspector, R.R., Factory	Tower Operators, R.R.
Investigators	Truck Dispatchers
Laboratory Technicians	Window Trimmers (Store)
Locomotive Engineers	Projectionists

c. Owner of Little Business (\$5,000 - \$10,000)

Cabinet Shop	Newsstand
Flower Shop	Tailor Shop
Grocery	

d. Farmers

Owners (\$10,000 - \$20,000)

5. Skilled Manual Employees

Auto Body Repairers	Gunsmiths
Bakers	Gauge Makers
Barbers	Hair Stylists
Blacksmiths	Heat Treaters
Boat Captains (private yacht)	Horticulturists
Bookbinders	Linemen, Utility
Boilermakers	Linotype Operators
Brakemen, R.R.	Lithographers
Brewers	Locksmiths
Bulldozer Operators	Loom Fixers
Butchers	Machinists (trained)
Cabinet Makers	Maintenance Foreman
Cable Splicers	Linoleum Layer (trained)
Carpenters	Masons
Casters (founders)	Masseurs
Cement Finishers	Mechanics (trained)
Cheese Makers	Milkmen
Chefs	Millwrights
Compositors	Moulders (trained)
Diemakers	Painters
Diesel Shovel Operators	Paperhangers
Electricians	Patrolmen, R.R.
Engravers	Pattern and Model Makers
Exterminators	Piano Builders
Fitters, Gas, Steam	Piano Tuners
Firemen, City	Plumbers
Firemen, R.R.	Policemen, City - prison guard
Foreman, Construction, Dairy	Postmen
Gardeners, Landscape (trained)	Printers
Glass Blowers	Radio, T.V., Maintenance
Glaziers	Diesel Engine Repair, Maintenance (trained)
Apprentice Projectionist	

INDEX OF SOCIAL POSITION

Skilled Manual Employees (cont.)

Repairmen, Home Appliance
Rope Splicer
Sheetmetal Workers (trained)
Shipsmiths
Shoe Repairmen (trained)
Stationary Engineers (licensed)
Stewards, Club
Switchmen, R.R.
Tailors (trained)
Telegraphers

Teletype Operators
Tool Makers
Track Supervisors, R.R.
Tractor-Trailer Trans.
Typographers
Upholsters (trained)
Watchmakers
Weavers
Welders
Yard Supervisors, R.R.

Small Farmers

Owners (under \$10,000)

Tenants who own farm equipment

6. Machine Operators and Semi-Skilled Employees

Aides, Hospital
Apprentices-Electricians, Printers,
 Steam Fitters, Toolmakers
Assembly Line Workers
Bartenders
Bingo Tenders
Building Superintendents (Cust.)
Bus Drivers
Chauffeurs
Checkers
Coin Machine Fillers
Cooks, Short Order
Delivery Man
Dressmakers, Machine
Elevator Operators
Enlisted Men, Military Services
Filers, Benders, Buffers
Foundry Workers
Garage and Gas Station Assistants
 (Service Station Attendants)
Greenhouse Workers
Guards, Doorkeepers, Watchmen
Hairdressers
Housekeepers
Meat Cutters and Packers
Meter Readers
Operators, Factory Machines
Bridge Tenders
Wrappers, Stores and Factories
Lumberjacks

Oilers, R.R.
Practical Nurses
Pressers, Clothing
Pump Operators
Receivers and Checkers
Roofers
Roller Skating Instructors
~~Set-Up-Men~~, Factories
Shapers
Signalmen, R.R.
Solderers, Factory
Sprayers, Paint
Steelworkers (not skilled)
Stranders, Wire Machines
Strippers, Rubber Factory
Taxi Drivers
Testers
Timers
Tire Moulders
Trainmen, R.R.
Truck Drivers, General
Waiters, Waitresses ("Better Places")
Weighers
Welders, Spot
Winders, Machine
Wiredrawers, Machine
Wine Bottlers
Wood Workers, Machine
Section Man R.R.

Farmers

Smaller Tenants who own little equipment.

INDEX OF SOCIAL POSITION

7. Unskilled Employees

Amusement Park Workers (Bowling Alleys, Pool Rooms, Life Guards)	Laborers, Construction Laborers, Unspecified
Ash Removers	Laundry Workers
Attendants, Parking Lots	Messengers
Cafeteria Workers	Platform Men, R.R.
Car Cleaners, R.R.	Peddlers
Carriers, Coal	Porters
Counter men	Roofer's Helpers
Dairy Workers	Shirt Folders
Deck Hands	Shoe Shiners
Domestics	Sorters, Rag and Salvage
Farm Helpers	Stage Hands
Fishermen (Clam Diggers)	Stevedores
Freight Handlers	Stock Handlers
Garbage Collectors	Street Cleaners
Grave Diggers	Unskilled Factory Workers
Grocery Boy	Struckmen, R.R.
God Carriers	Waitresses - "Hash Houses"
Log Killers	Washers, Cars
Hospital Workers, Unspecified	Window Cleaners
Hostlers, R.R.	Woodchoppers
Janitors (Sweepers)	Coal Miners, Unspecified
Relief, Public, Private	
Unemployed (no occupation)	
<u>Farmers:</u> Share Croppers	

APPENDIX K

CORRELATION MATRIX OF NATIVE TRANSIENT DATA

CORRELATION MATRIX

1	2	3	4	5	6	7	8	9
1 1.0000	0.31000	-0.70000E-01	-0.30000E-01	-0.13000	0.26000	0.80000E-01	0.50000E-01	0.40000E-01
2 0.31000	1.0000	0.55000	0.86000	0.30000	0.24000	-0.22000	0.75000	0.41000
3 -0.70000E-01	0.55000	1.0000	-0.10000E-01	-0.20000E-01	0.10000E-01	0.40000E-01	0.80000	0.17000
4 -0.30000E-01	0.86000	-0.10000E-01	1.0000	0.35000	0.90000	0.60000E-01	0.50000	0.66000
5 -0.13000	0.30000	-0.20000E-01	0.35000	1.0000	0.90000	0.10000	0.66000	0.59000
6 0.26000	0.24000	0.10000E-01	0.90000	0.90000	1.0000	0.10000	0.37000	0.59000
7 0.80000E-01	0.50000E-01	0.40000E-01	0.60000E-01	0.10000	0.90000	1.0000	0.16000	0.18000
8 0.50000E-01	0.75000	0.80000	0.50000	0.66000	0.37000	0.16000	1.0000	0.71000
9 0.40000E-01	0.41000	0.17000	0.66000	0.59000	0.59000	0.18000	0.71000	1.0000

APPENDIX L

CORRELATION MATRIX OF NATIVE STUDENT DATA

1	1.000	0.156	0.566	0.474	0.171	0.412	0.166	-0.004	0.015	-0.16
2	0.144	1.000	0.339	0.135	0.104	0.442	0.395	0.467	0.331	-0.08
3	0.566	0.339	1.000	0.416	0.179	0.576	0.394	0.171	0.112	-0.18
4	0.474	0.135	0.416	1.000	0.194	0.412	0.111	0.073	-0.045	-0.22
5	0.171	0.104	0.179	0.194	1.000	0.073	0.530	0.147	0.445	0.26
6	0.442	0.467	0.576	0.412	0.073	1.000	0.316	0.262	-0.002	-0.31
7	0.166	0.395	0.394	0.111	0.530	0.316	1.000	0.263	0.336	0.00
8	-0.004	0.467	0.171	0.073	0.147	0.262	0.263	1.000	0.174	0.01
9	0.015	0.331	0.112	-0.045	0.445	-0.002	0.336	0.134	1.000	0.22
10	-0.16	-0.08	-0.141	-0.22	0.261	-0.310	0.089	0.014	0.222	1.00
11	-0.406	-0.022	-0.242	-0.241	0.095	-0.250	0.051	0.146	-0.060	0.20
12	-0.385	-0.224	-0.334	-0.245	-0.030	-0.355	-0.093	0.111	-0.235	0.23
13	-0.332	0.015	-0.176	-0.241	0.145	-0.254	0.057	0.250	0.132	0.33
14	-0.345	-0.104	-0.229	-0.222	0.215	-0.274	0.004	0.088	-0.102	0.26
15	-0.309	-0.069	-0.238	-0.139	0.349	-0.145	0.011	-0.127	0.317	0.41
16	0.269	-0.157	0.019	0.033	0.000	-0.144	-0.103	-0.157	0.024	0.15
17	0.235	-0.179	-0.044	-0.123	0.062	-0.154	-0.108	-0.145	0.042	0.24
18	0.309	-0.124	0.120	0.005	0.000	0.021	-0.043	-0.101	0.071	0.13
19	0.272	-0.091	-0.090	0.101	0.158	-0.069	0.048	-0.109	0.066	0.12
20	0.151	-0.179	-0.101	-0.145	0.243	-0.342	-0.074	-0.139	0.165	0.17
21	0.243	-0.114	-0.125	-0.129	0.210	-0.281	-0.042	-0.116	0.365	0.34
22	0.160	-0.177	-0.179	-0.160	0.238	-0.363	-0.066	-0.135	0.247	0.40
23	-0.134	-0.231	-0.371	-0.204	0.009	-0.437	-0.213	-0.049	-0.233	0.26
24	-0.144	-0.323	-0.391	-0.205	0.002	-0.416	-0.195	-0.076	-0.297	0.30
25	-0.064	-0.291	-0.296	-0.192	0.009	-0.385	-0.207	-0.032	-0.139	0.24
26	-0.119	-0.199	-0.301	-0.195	0.019	-0.390	-0.177	-0.109	-0.199	0.31
27	-0.127	-0.237	-0.147	-0.222	-0.031	-0.416	-0.219	-0.067	-0.256	0.29
28	0.002	-0.255	-0.142	-0.146	0.101	-0.285	-0.043	-0.075	-0.113	0.27
29	0.149	-0.163	-0.167	-0.147	0.302	-0.299	-0.045	-0.081	0.169	0.35
30	0.239	-0.127	-0.044	-0.146	0.282	-0.239	0.050	-0.130	0.274	0.30
31	0.155	-0.227	-0.170	-0.197	0.242	-0.302	-0.063	-0.123	0.084	0.34
32	0.273	-0.097	0.051	0.244	0.107	-0.024	-0.033	-0.016	-0.173	0.07
33	0.507	-0.002	0.132	0.144	0.164	0.021	-0.044	-0.034	0.055	0.12
34	0.149	-0.145	-0.052	0.147	-0.077	-0.068	-0.162	-0.016	-0.299	0.02
35	0.003	-0.446	-0.252	-0.110	-0.200	-0.371	-0.356	-0.299	-0.233	0.10
36	0.052	-0.592	-0.259	-0.140	-0.120	-0.379	-0.374	-0.342	-0.176	0.10
37	-0.229	-0.478	-0.562	-0.257	-0.045	-0.515	-0.401	-0.352	-0.098	0.30
38	-0.245	-0.476	-0.476	-0.119	-0.120	-0.505	-0.336	-0.326	-0.186	0.20
39	0.150	-0.422	-0.254	-0.095	-0.145	-0.377	-0.345	-0.337	-0.288	-0.04
40	0.264	-0.204	0.002	0.100	-0.054	-0.042	-0.174	-0.133	-0.446	0.06
41	0.260	-0.193	0.055	0.124	-0.047	-0.059	-0.184	-0.110	-0.375	0.06
42	0.029	-0.275	-0.324	-0.220	0.234	-0.447	-0.153	-0.209	0.017	0.25
43	-0.197	-0.581	-0.457	-0.245	-0.127	-0.481	-0.314	-0.161	-0.254	0.22
44	0.204	-0.075	-0.074	-0.107	0.372	-0.217	0.012	-0.152	0.277	0.32
45	0.241	-0.067	-0.000	-0.070	0.258	-0.250	0.038	-0.078	0.470	0.30
46	-0.012	-0.055	-0.062	0.051	0.119	0.013	0.062	0.188	-0.271	0.29
47	-0.267	0.272	0.066	-0.114	0.329	0.123	0.256	0.459	0.124	0.28
48	-0.080	0.421	0.241	0.011	0.453	0.558	0.566	0.261	0.536	0.17
49	-0.172	0.349	0.003	-0.149	0.582	0.085	0.498	0.375	0.670	0.30
50	-0.189	0.523	0.135	-0.120	0.524	0.099	0.453	0.394	0.640	0.26
51	-0.107	0.395	0.129	-0.158	0.576	0.023	0.441	0.302	0.694	0.24
52	0.037	0.258	0.021	-0.191	0.596	-0.080	0.370	0.169	0.654	0.44
53	-0.150	0.451	0.102	-0.122	0.530	0.142	0.426	0.388	0.669	0.35
54	-0.285	-0.010	-0.215	-0.251	0.176	-0.229	0.095	-0.072	0.433	0.22
55	-0.012	0.092	-0.109	-0.112	0.265	-0.203	0.018	-0.065	0.447	0.18
56	0.123	0.100	0.044	-0.133	0.402	-0.164	0.130	0.040	0.469	0.34
57	-0.221	0.250	0.025	-0.140	0.393	0.035	0.349	0.369	0.601	0.24
58	-0.079	-0.310	-0.283	-0.070	-0.101	-0.230	-0.217	-0.476	0.182	-0.05
59	-0.001	-0.285	-0.358	-0.137	-0.044	-0.413	-0.297	-0.426	0.232	0.05

60	-0.174	-0.314	-0.326	-0.177	-0.147	-0.371	-0.311	-0.424	0.137	-0.03
61	-0.059	-0.208	-0.274	-0.200	-0.010	-0.440	-0.284	-0.424	0.287	-0.06
62	-0.121	-0.206	-0.345	-0.293	-0.089	-0.421	-0.302	-0.423	0.241	0.05
63	-0.040	-0.241	-0.205	-0.187	0.032	-0.331	-0.248	-0.349	0.237	-0.02
64	-0.250	-0.360	-0.343	-0.216	-0.247	-0.429	-0.329	-0.455	0.154	-0.04
65	-0.134	-0.312	-0.322	-0.217	-0.070	-0.424	-0.310	-0.428	0.214	0.06
66	-0.245	0.097	-0.135	-0.234	0.297	-0.241	0.179	0.029	0.715	0.21
67	0.137	-0.142	-0.241	-0.048	0.070	-0.119	-0.123	-0.300	0.190	0.00
68	-0.264	0.226	-0.017	-0.143	0.211	0.070	0.264	0.137	0.431	-0.00
69	-0.247	0.026	0.290	0.177	0.008	0.115	-0.019	-0.149	0.252	-0.10
70	0.167	-0.245	0.144	-0.071	0.015	-0.110	-0.017	-0.218	0.417	0.08
71	0.101	-0.024	0.091	0.041	-0.004	-0.077	-0.025	-0.229	0.203	-0.02
72	0.275	-0.140	0.100	0.045	0.041	-0.001	0.032	-0.222	0.193	-0.05
73	0.257	-0.112	-0.101	0.041	-0.001	-0.003	-0.050	-0.244	0.133	0.07
74	0.141	0.001	0.164	0.117	0.221	0.111	0.257	0.022	0.445	0.07
75	-0.114	0.007	0.007	-0.043	0.120	0.093	0.189	0.079	0.426	0.00
76	-0.101	-0.007	-0.075	-0.100	-0.075	-0.113	-0.127	-0.274	0.251	-0.01
77	-0.129	0.187	-0.001	-0.100	-0.010	-0.115	0.115	0.058	0.605	0.18
78	-0.210	-0.002	0.041	0.041	-0.077	-0.200	-0.251	-0.470	0.249	0.02
79	0.000	-0.100	-0.000	0.000	0.000	-0.100	-0.100	-0.100	0.249	0.00

	11	12	13	14	15	16	17	18	19	20
1	-0.454	-0.486	-0.522	-0.565	-0.614	-0.669	-0.735	-0.803	-0.872	-0.951
2	-0.022	-0.106	-0.181	-0.244	-0.305	-0.367	-0.437	-0.514	-0.591	-0.672
3	-0.267	-0.304	-0.371	-0.429	-0.493	-0.561	-0.634	-0.710	-0.790	-0.881
4	-0.261	-0.265	-0.261	-0.257	-0.246	-0.233	-0.213	-0.185	-0.151	-0.165
5	-0.095	-0.090	-0.145	-0.218	-0.300	-0.392	-0.493	-0.600	-0.715	-0.843
6	-0.250	-0.255	-0.256	-0.274	-0.285	-0.294	-0.304	-0.311	-0.319	-0.332
7	-0.061	-0.067	-0.057	-0.066	-0.071	-0.103	-0.108	-0.048	-0.048	-0.074
8	-0.166	-0.111	-0.050	-0.039	-0.127	-0.157	-0.165	-0.101	-0.109	-0.139
9	-0.060	-0.055	-0.132	-0.102	-0.117	-0.054	-0.042	-0.071	-0.066	-0.165
10	-0.203	-0.239	-0.299	-0.356	-0.417	-0.481	-0.545	-0.613	-0.682	-0.757
11	1.000	0.766	0.486	0.510	-0.103	-0.053	0.007	-0.096	-0.059	0.033
12	0.665	1.000	0.565	0.522	-0.062	0.038	0.062	-0.034	0.022	0.141
13	0.484	0.535	1.000	0.558	0.184	0.045	0.035	0.067	0.016	0.141
14	0.513	0.573	0.538	1.000	0.014	0.057	0.112	0.014	0.067	0.154
15	-0.103	-0.068	0.086	0.019	1.000	0.335	0.377	0.351	0.471	0.510
16	-0.052	0.037	0.046	0.057	0.236	1.000	0.792	0.631	0.443	0.630
17	-0.002	0.062	0.085	0.113	0.277	0.792	1.000	0.655	0.569	0.751
18	-0.095	-0.034	0.067	0.014	0.351	0.681	0.655	1.000	0.355	0.529
19	-0.032	0.002	0.034	0.062	0.471	0.443	0.569	0.355	1.000	0.706
20	-0.006	0.141	0.161	0.154	0.510	0.630	0.751	0.529	0.706	1.000
21	-0.002	-0.060	0.119	0.031	0.412	0.412	0.551	0.454	0.585	0.709
22	0.015	0.127	0.214	0.112	0.633	0.567	0.692	0.565	0.630	0.835
23	0.266	0.623	0.750	0.283	0.225	0.232	0.313	0.194	0.266	0.434
24	0.409	0.719	0.479	0.492	0.182	0.221	0.393	0.205	0.301	0.435
25	0.333	0.453	0.463	0.335	0.289	0.377	0.434	0.302	0.325	0.534
26	0.248	0.465	0.407	0.442	0.234	0.313	0.415	0.267	0.324	0.523
27	0.402	0.598	0.446	0.434	0.166	0.227	0.390	0.284	0.328	0.465
28	0.279	0.411	0.377	0.265	0.125	0.243	0.365	0.275	0.331	0.491
29	0.005	0.171	0.168	0.113	0.654	0.413	0.452	0.411	0.494	0.676
30	0.013	0.094	0.107	0.053	0.624	0.247	0.331	0.410	0.312	0.429
31	0.074	0.209	0.298	0.200	0.744	0.402	0.517	0.423	0.479	0.584
32	0.022	0.148	0.076	0.050	0.558	0.341	0.314	0.309	0.377	0.287
33	-0.155	-0.110	-0.050	-0.064	0.362	0.398	0.366	0.461	0.365	0.365
34	0.068	0.202	0.135	0.269	0.183	0.301	0.510	0.292	0.292	0.306
35	0.046	0.193	-0.047	0.098	0.217	0.322	0.335	0.344	0.168	0.263

36	0.019	0.164	0.008	0.116	0.264	0.277	0.424	0.443	0.256	0.400
37	0.170	0.314	-0.139	0.222	0.327	0.185	0.236	0.204	0.231	0.446
38	0.249	0.332	0.084	0.247	0.175	0.035	0.168	0.065	0.129	0.277
39	-0.009	0.171	-0.051	0.190	0.177	0.275	0.302	0.265	0.259	0.327
40	0.001	0.196	0.015	0.132	0.115	0.300	0.247	0.369	0.371	0.319
41	0.034	0.201	0.060	0.175	0.225	0.371	0.323	0.237	0.327	0.290
42	0.154	0.243	0.242	0.241	0.562	0.383	0.467	0.275	0.390	0.599
43	0.284	0.401	0.404	0.393	0.210	0.317	0.379	0.194	0.287	0.415
44	0.005	-0.001	0.103	-0.024	0.469	0.251	0.416	0.263	0.344	0.581
45	-0.114	-0.042	0.192	-0.015	0.692	0.222	0.414	0.382	0.373	0.542
46	0.297	0.507	0.399	0.451	0.066	0.161	0.213	0.112	0.230	0.264
47	0.442	0.326	0.481	0.335	-0.064	-0.083	-0.018	-0.123	-0.049	0.021
48	0.006	-0.103	0.144	-0.022	0.113	-0.048	-0.050	-0.024	-0.043	-0.033
49	0.120	-0.067	0.281	0.057	0.227	-0.019	-0.010	0.017	-0.017	0.119
50	0.162	-0.070	0.274	0.084	0.121	-0.073	-0.056	-0.044	-0.081	0.013
51	0.115	-0.082	0.283	0.076	0.319	0.017	0.055	0.045	0.043	0.192
52	0.039	-0.080	0.241	0.025	0.500	0.151	0.204	0.136	0.201	0.361
53	0.163	-0.101	0.294	0.066	0.216	-0.039	-0.018	0.007	-0.025	0.127
54	-0.049	-0.206	0.043	-0.008	0.145	-0.014	-0.021	-0.097	-0.072	0.050
55	-0.091	-0.132	0.140	-0.010	0.375	0.153	0.169	0.093	0.176	0.326
56	-0.071	-0.090	0.114	-0.038	0.402	0.224	0.266	0.215	0.233	0.377
57	0.142	-0.087	0.267	0.050	0.047	-0.071	-0.047	-0.131	-0.057	-0.004
58	-0.245	-0.205	-0.218	-0.231	0.168	0.071	0.066	0.118	0.023	0.113
59	-0.107	-0.159	-0.211	-0.246	0.283	0.144	0.134	0.042	0.156	0.259
60	-0.247	-0.227	-0.301	-0.204	0.065	0.074	0.014	-0.030	0.004	0.064
61	-0.239	-0.215	-0.185	-0.250	0.255	0.140	0.161	0.129	0.126	0.293
62	-0.191	-0.177	-0.068	-0.197	0.262	0.053	0.083	0.029	0.063	0.175
63	-0.200	-0.152	-0.164	-0.189	0.355	0.157	0.175	0.040	0.217	0.292
64	-0.212	-0.204	-0.194	-0.200	0.045	-0.036	-0.056	-0.093	-0.055	0.002
65	-0.234	-0.221	-0.230	-0.246	0.274	0.000	0.035	0.024	0.126	0.226
66	-0.001	-0.132	0.136	-0.045	0.226	-0.021	-0.003	-0.043	0.006	0.123
67	-0.227	-0.177	-0.194	-0.139	0.227	0.165	0.183	0.259	0.139	0.225
68	0.002	-0.194	0.050	-0.114	-0.132	-0.158	-0.217	-0.108	-0.275	-0.207
69	-0.267	-0.212	-0.328	-0.270	0.112	0.020	-0.050	-0.128	0.048	-0.056
70	-0.240	-0.256	-0.218	-0.283	0.319	0.045	0.022	-0.017	0.099	0.111
71	-0.342	-0.404	-0.270	-0.297	0.064	-0.054	-0.145	-0.186	0.070	-0.066
72	-0.334	-0.265	-0.267	-0.293	0.266	0.072	0.010	0.033	0.174	0.131
73	-0.215	-0.205	-0.267	-0.259	0.174	0.074	0.029	-0.029	0.100	0.061
74	-0.243	-0.274	-0.188	-0.222	0.222	0.044	-0.052	-0.033	0.156	-0.050
75	-0.132	-0.204	-0.023	-0.204	-0.015	-0.163	-0.115	-0.160	-0.215	-0.111
76	-0.177	-0.207	-0.261	-0.274	0.170	-0.011	-0.049	-0.039	-0.108	-0.030
77	-0.161	-0.200	-0.067	-0.217	0.292	-0.015	-0.062	-0.044	-0.102	0.001
78	-0.261	-0.250	-0.227	-0.277	0.211	0.023	0.075	0.049	0.089	0.167
79	-0.264	-0.203	-0.112	-0.219	0.201	0.275	0.301	0.273	0.037	0.221

	21	22	23	24	25	26	27	28	29	30
1	0.267	0.110	-0.134	-0.114	-0.064	-0.110	-0.120	0.003	0.190	0.221
2	-0.114	-0.177	-0.331	-0.333	-0.211	-0.187	-0.117	-0.235	-0.184	-0.11
3	-0.120	-0.173	-0.271	-0.191	-0.097	-0.113	-0.113	-0.152	-0.167	-0.11
4	-0.120	-0.140	-0.104	-0.122	-0.111	-0.117	-0.222	-0.156	-0.147	-0.18
5	0.310	0.284	0.005	0.022	0.009	0.015	-0.071	0.101	0.302	0.26
6	-0.291	-0.313	-0.437	-0.435	-0.345	-0.390	-0.416	-0.285	-0.299	-0.23
7	-0.047	-0.096	-0.217	-0.195	-0.207	-0.177	-0.210	-0.043	-0.045	0.05
8	-0.116	-0.135	-0.049	-0.065	-0.082	-0.100	-0.067	-0.076	-0.091	-0.13
9	0.265	0.267	-0.233	-0.227	-0.139	-0.122	-0.256	-0.113	0.149	0.27
10	0.265	0.408	0.264	0.302	0.249	0.319	0.294	0.275	0.359	0.30
11	-0.029	0.014	0.398	0.409	0.333	0.243	0.402	0.279	0.095	0.01

12	-0.060	0.122	0.623	0.619	0.452	0.465	0.598	0.411	0.171	0.09
13	0.114	0.219	0.280	0.479	0.463	0.404	0.446	0.327	0.198	0.19
14	0.031	0.192	0.353	0.422	0.332	0.442	0.499	0.365	0.113	0.05
15	0.612	0.637	0.235	0.132	0.289	0.234	0.296	0.326	0.659	0.62
16	0.426	0.567	0.232	0.221	0.377	0.313	0.287	0.243	0.413	0.24
17	0.561	0.692	0.313	0.393	0.434	0.415	0.390	0.365	0.489	0.23
18	0.454	0.545	0.194	0.205	0.307	0.267	0.294	0.275	0.411	0.41
19	0.585	0.630	0.266	0.301	0.325	0.324	0.378	0.331	0.494	0.31
20	0.702	0.836	0.424	0.435	0.534	0.523	0.445	0.491	0.676	0.43
21	1.000	0.790	0.315	0.278	0.291	0.313	0.357	0.269	0.592	0.57
22	0.790	1.000	0.409	0.413	0.531	0.509	0.507	0.286	0.625	0.58
23	0.315	0.409	1.000	0.761	0.672	0.690	0.810	0.593	0.537	0.32
24	0.278	0.413	0.761	1.000	0.667	0.770	0.848	0.709	0.491	0.26
25	0.291	0.531	0.672	0.667	1.000	0.725	0.819	0.443	0.515	0.29
26	0.312	0.509	0.670	0.773	0.735	1.000	0.827	0.524	0.569	0.20
27	0.257	0.507	0.810	0.846	0.819	0.827	1.000	0.615	0.579	0.41
28	0.369	0.386	0.572	0.709	0.447	0.524	0.615	1.000	0.455	0.51
29	0.592	0.625	0.537	0.491	0.515	0.569	0.579	0.455	1.000	0.49
30	0.572	0.565	0.323	0.265	0.299	0.202	0.416	0.511	0.496	1.000
31	0.632	0.649	0.527	0.652	0.534	0.545	0.647	0.587	0.760	0.63
32	0.252	0.256	0.438	0.428	0.363	0.387	0.456	0.412	0.411	0.29
33	0.380	0.384	0.242	0.242	0.269	0.212	0.298	0.199	0.408	0.39
34	0.159	0.260	0.564	0.604	0.444	0.504	0.595	0.472	0.261	0.25
35	0.143	0.232	0.415	0.454	0.372	0.435	0.501	0.387	0.332	0.23
36	0.223	0.363	0.449	0.476	0.439	0.484	0.537	0.437	0.447	0.36
37	0.322	0.427	0.536	0.550	0.515	0.561	0.609	0.450	0.476	0.35
38	0.204	0.216	0.449	0.511	0.395	0.443	0.512	0.453	0.303	0.13
39	0.272	0.242	0.449	0.424	0.402	0.421	0.430	0.382	0.365	0.23
40	0.122	0.242	0.499	0.544	0.411	0.473	0.531	0.441	0.355	0.19
41	0.240	0.237	0.534	0.529	0.460	0.523	0.535	0.505	0.364	0.29
42	0.535	0.581	0.592	0.611	0.533	0.570	0.543	0.503	0.616	0.53
43	0.214	0.262	0.714	0.688	0.584	0.638	0.701	0.535	0.445	0.27
44	0.549	0.496	0.275	0.315	0.299	0.318	0.276	0.444	0.526	0.42
45	0.647	0.640	0.251	0.153	0.285	0.210	0.225	0.264	0.571	0.59
46	0.114	0.215	0.528	0.612	0.475	0.524	0.620	0.475	0.262	0.14
47	-0.051	0.014	0.168	0.215	0.142	0.177	0.208	0.174	0.017	-0.00
48	0.074	-0.023	-0.268	-0.275	-0.206	-0.223	-0.231	-0.142	-0.012	0.04
49	0.194	0.147	-0.150	-0.173	-0.073	-0.110	-0.153	-0.048	0.120	0.12
50	0.095	0.091	-0.170	-0.208	-0.097	-0.146	-0.179	-0.176	0.052	0.07
51	0.202	0.252	-0.025	-0.145	-0.014	-0.059	-0.106	-0.062	0.227	0.22
52	0.482	0.426	0.020	-0.042	0.081	0.061	0.007	0.054	0.403	0.39
53	0.223	0.141	-0.168	-0.195	-0.093	-0.116	-0.170	-0.075	0.128	0.14
54	0.165	0.097	-0.234	-0.275	-0.157	-0.209	-0.293	-0.165	0.024	0.07
55	0.324	0.319	-0.011	-0.041	0.059	0.017	-0.043	0.087	0.296	0.28
56	0.457	0.420	0.089	0.093	0.153	0.119	0.093	0.142	0.410	0.38
57	0.104	0.052	-0.201	-0.208	-0.144	-0.177	-0.225	-0.155	-0.004	0.04
58	0.225	0.126	-0.148	-0.232	-0.127	-0.171	-0.231	-0.125	0.089	0.13
59	0.342	0.257	-0.027	-0.125	-0.019	-0.065	-0.119	-0.048	0.217	0.19
60	0.156	0.040	-0.149	-0.142	-0.164	-0.189	-0.249	-0.057	0.003	-0.02
61	0.395	0.324	-0.010	-0.106	0.025	-0.013	-0.099	0.017	0.280	0.25
62	0.274	0.214	-0.075	-0.141	-0.033	-0.081	-0.130	-0.066	0.158	0.16
63	0.400	0.319	0.001	-0.063	0.027	-0.015	-0.062	-0.029	0.282	0.22
64	0.097	0.052	-0.138	-0.202	-0.132	-0.169	-0.228	-0.132	-0.052	0.04
65	0.225	0.212	-0.059	-0.145	-0.099	-0.090	-0.143	-0.046	0.184	0.16
66	0.246	0.197	-0.158	-0.246	-0.106	-0.153	-0.237	-0.114	0.099	0.20
67	0.328	0.205	-0.041	-0.062	0.011	-0.020	-0.042	0.002	0.260	0.29
68	-0.110	-0.193	-0.340	-0.355	-0.294	-0.325	-0.394	-0.275	-0.192	-0.10
69	0.027	-0.074	-0.227	-0.225	-0.285	-0.320	-0.400	-0.265	-0.085	0.00
70	0.278	0.191	-0.222	-0.278	-0.144	-0.202	-0.253	-0.131	0.135	0.18
71	0.053	-0.066	-0.352	-0.378	-0.317	-0.352	-0.404	-0.302	-0.111	-0.06

72	0.241	0.250	-0.147	-0.198	-0.126	-0.159	-0.192	-0.090	0.133	0.14
73	0.149	0.077	-0.175	-0.290	-0.179	-0.213	-0.261	-0.131	0.072	0.02
74	0.191	-0.027	-0.367	-0.391	-0.394	-0.355	-0.441	-0.228	-0.017	0.00
75	0.014	-0.101	-0.311	-0.317	-0.260	-0.211	-0.322	-0.145	-0.064	-0.06
76	0.097	-0.034	-0.251	-0.11	-0.224	-0.264	-0.354	-0.238	-0.074	-0.01
77	0.222	0.124	-0.211	-0.076	-0.143	-0.313	-0.177	-0.287	0.025	0.15
78	0.222	0.123	-0.091	-0.154	-0.026	-0.192	-0.122	-0.044	0.126	0.15
79	0.12	0.11	-0.07	-0.15	0.051	-0.122	-0.062	-0.046	0.241	0.25

31 32 33 34 35 36 37 38 39 40

1	0.155	0.172	0.507	0.189	0.003	0.053	-0.220	-0.325	0.150	0.3
2	-0.227	-0.007	-0.000	-0.142	-0.486	-0.400	-0.478	-0.475	-0.422	-0.2
3	-0.179	0.051	0.129	-0.052	-0.352	-0.299	-0.548	-0.476	-0.255	0.0
4	-0.197	0.244	0.244	0.147	-0.110	-0.140	-0.257	-0.219	-0.025	0.1
5	0.242	0.109	0.154	-0.077	-0.200	-0.100	-0.048	-0.133	-0.144	-0.0
6	-0.302	-0.024	0.021	-0.098	-0.321	-0.379	-0.559	-0.505	-0.277	-0.0
7	-0.062	-0.073	-0.046	-0.142	-0.356	-0.374	-0.406	-0.382	-0.366	-0.1
8	-0.123	-0.016	-0.034	-0.010	-0.290	-0.442	-0.352	-0.323	-0.337	-0.0
9	0.084	-0.173	0.050	-0.299	-0.233	-0.176	-0.099	-0.186	-0.298	-0.0
10	0.366	0.071	0.124	0.085	0.109	0.183	0.302	0.208	-0.040	0.0
11	0.074	0.032	-0.156	0.043	0.046	0.019	0.179	0.248	-0.008	0.0
12	0.208	0.198	-0.110	0.282	0.198	0.180	0.314	0.332	0.170	0.1
13	0.246	0.078	-0.050	0.125	-0.047	0.008	0.138	0.086	-0.051	0.0
14	0.200	0.064	-0.034	0.269	0.058	0.115	0.222	0.247	0.106	0.1
15	0.744	0.260	0.392	0.123	0.217	0.364	0.327	0.155	0.196	0.1
16	0.402	0.341	-0.390	0.401	0.322	0.397	0.195	0.086	0.275	0.3
17	0.517	0.316	0.358	0.210	0.335	0.424	0.236	0.168	0.308	0.3
18	0.423	0.309	0.461	0.344	0.344	0.443	0.204	0.065	0.265	0.3
19	0.479	0.377	0.365	0.292	0.168	0.256	0.231	0.129	0.259	0.3
20	0.584	0.287	0.365	0.306	0.262	0.400	0.446	0.277	0.327	0.3
21	0.632	0.250	0.330	0.159	0.193	0.333	0.382	0.204	0.272	0.1
22	0.649	0.256	0.384	0.260	0.238	0.183	0.437	0.216	0.267	0.0
23	0.537	0.478	0.242	0.564	0.415	0.449	0.534	0.449	0.468	0.6
24	0.602	0.420	0.249	0.604	0.454	0.446	0.556	0.511	0.423	0.1
25	0.534	0.363	0.269	0.464	0.322	0.448	0.515	0.395	0.407	0.4
26	0.565	0.387	0.212	0.506	0.435	0.464	0.561	0.443	0.471	0.0
27	0.647	0.450	0.248	0.595	0.501	0.537	0.604	0.512	0.490	0.5
28	0.587	0.412	0.190	0.473	0.387	0.427	0.450	0.453	0.382	0.4
29	0.780	0.411	0.408	0.261	0.322	0.487	0.476	0.303	0.365	0.2
30	0.639	0.291	0.397	0.250	0.232	0.267	0.359	0.188	0.236	0.1
31	1.000	0.415	0.400	0.279	0.424	0.444	0.501	0.363	0.405	0.3
32	0.415	1.000	0.596	0.440	0.385	0.415	0.264	0.233	0.434	0.6
33	0.408	0.594	1.000	0.440	0.299	0.370	0.184	0.056	0.308	0.4
34	0.379	0.640	0.648	1.000	0.445	0.455	0.304	0.261	0.428	0.5
35	0.424	0.325	0.290	0.445	1.000	0.033	0.754	0.695	0.698	0.4
36	0.544	0.415	0.270	0.489	0.531	1.000	0.100	0.721	0.645	0.4
37	0.521	0.244	0.104	0.374	0.764	0.765	1.000	0.898	0.611	0.1
38	0.363	0.232	0.056	0.261	0.695	0.721	0.698	1.000	0.614	0.1
39	0.405	0.434	0.206	0.428	0.645	0.645	0.611	0.614	1.000	0.1
40	0.422	0.612	0.472	0.624	0.647	0.679	0.343	0.287	0.501	1.0
41	0.442	0.649	0.450	0.637	0.414	0.426	0.334	0.289	0.472	0.7
42	0.724	0.437	0.239	0.437	0.431	0.522	0.601	0.475	0.452	0.5
43	0.513	0.256	0.147	0.428	0.461	0.462	0.599	0.505	0.452	0.4
44	0.484	0.256	0.374	0.194	0.207	0.302	0.359	0.244	0.242	0.0
45	0.509	0.277	0.431	0.111	0.163	0.298	0.244	0.120	0.134	0.0
46	0.325	0.465	0.269	0.555	0.264	0.257	0.250	0.210	0.205	0.4
47	0.045	-0.031	-0.120	0.057	-0.237	-0.258	-0.152	-0.151	-0.312	-0.1

48	-0.061	-0.086	0.045	-0.178	-0.378	-0.366	-0.332	-0.410	-0.460	-0.3
49	0.067	-0.195	-0.026	-0.274	-0.358	-0.221	-0.290	-0.279	-0.443	-0.2
50	-0.003	-0.248	-0.054	-0.273	-0.405	-0.372	-0.260	-0.340	-0.505	-0.3
51	0.159	-0.162	0.034	-0.216	-0.364	-0.277	-0.141	-0.202	-0.452	-0.3
52	0.339	-0.010	0.191	-0.133	-0.192	-0.095	0.009	-0.120	-0.244	-0.2
53	0.059	-0.219	-0.042	-0.260	-0.416	-0.354	-0.231	-0.310	-0.400	-0.3
54	-0.052	-0.360	-0.106	-0.415	-0.031	-0.036	0.111	0.070	-0.170	-0.4
55	0.232	-0.092	0.114	-0.123	-0.037	0.051	0.153	0.054	0.054	-0.3
56	0.393	0.106	0.257	0.005	0.045	0.150	0.205	0.073	0.040	0.0
57	-0.052	-0.254	-0.125	-0.315	-0.393	-0.375	-0.242	-0.260	-0.425	-0.4
58	0.046	-0.160	0.025	-0.217	0.234	0.279	0.331	0.295	0.316	-0.1
59	0.138	-0.107	0.054	-0.204	0.258	0.315	0.419	0.347	0.321	-0.1
60	-0.025	-0.135	-0.022	-0.265	0.254	0.241	0.334	0.363	0.200	-0.1
61	0.201	-0.115	0.057	-0.200	0.250	0.344	0.446	0.360	0.302	-0.1
62	0.105	-0.172	-0.001	-0.232	0.256	0.317	0.402	0.337	0.260	-0.0
63	0.229	-0.030	0.097	-0.142	0.242	0.221	0.413	0.339	0.275	-0.1
64	-0.029	-0.237	-0.172	-0.347	0.179	0.201	0.303	0.304	0.196	-0.2
65	0.111	-0.142	-0.012	-0.235	0.252	0.320	0.421	0.360	0.302	-0.1
66	0.002	-0.222	-0.100	-0.250	-0.173	-0.104	0.029	-0.012	-0.171	-0.1
67	0.265	0.021	0.213	-0.044	0.178	0.231	0.232	0.127	0.096	0.0
68	-0.216	-0.406	-0.232	-0.275	-0.305	-0.254	-0.250	-0.248	-0.395	-0.4
69	-0.150	-0.114	0.012	-0.282	-0.032	-0.085	-0.127	-0.149	0.004	-0.0
70	0.065	-0.120	0.082	-0.291	0.055	0.110	0.106	0.093	0.022	-0.1
71	-0.174	-0.167	-0.023	-0.292	-0.071	-0.074	-0.052	-0.094	-0.053	-0.1
72	0.092	0.026	0.179	-0.112	0.050	0.076	0.057	-0.015	0.011	0.0
73	-0.006	-0.028	0.114	-0.156	0.111	0.120	0.135	0.099	0.163	-0.0
74	-0.053	-0.040	0.107	-0.243	-0.140	-0.112	-0.120	-0.256	-0.120	-0.3
75	-0.211	-0.260	-0.121	-0.207	-0.247	-0.211	-0.103	-0.200	-0.236	-0.1
76	-0.145	-0.231	-0.110	-0.251	0.073	0.095	0.021	0.077	0.042	-0.1
77	-0.072	-0.200	-0.020	-0.241	-0.211	-0.195	-0.101	-0.149	-0.272	-0.0
78	0.066	-0.150	0.037	-0.206	0.179	0.185	0.254	0.314	0.278	-0.1
79	0.200	0.024	0.251	-0.020	0.100	0.021	0.010	0.174	0.219	-0.1

	41	42	43	44	45	46	47	48	49	50
1	0.769	0.024	-0.117	0.204	0.241	-0.012	-0.266	0.080	-0.112	-0.112
2	-0.163	-0.275	-0.231	-0.275	-0.067	-0.055	0.172	0.421	0.249	0.511
3	0.055	-0.224	-0.427	-0.074	-0.080	-0.072	0.056	0.241	0.032	0.111
4	0.104	-0.327	-0.232	-0.107	-0.179	0.058	-0.104	0.011	-0.149	-0.111
5	-0.047	0.234	-0.127	0.172	0.452	0.119	0.249	0.453	0.582	0.511
6	-0.050	-0.444	-0.401	-0.217	-0.230	0.013	0.123	0.359	0.025	0.000
7	-0.164	-0.153	-0.214	0.012	0.006	0.002	0.255	0.546	0.498	0.411
8	-0.110	-0.309	-0.141	-0.153	-0.079	0.124	0.459	0.341	0.375	0.211
9	-0.275	0.017	-0.254	0.277	0.470	-0.271	0.124	0.526	0.070	0.000
10	0.067	0.357	0.242	0.325	0.395	0.246	0.280	0.171	0.305	0.000
11	0.034	0.164	0.286	0.005	-0.114	0.597	0.442	0.006	0.128	0.111
12	0.201	0.543	0.495	-0.001	-0.043	0.507	0.326	-0.193	-0.007	-0.000
13	0.064	0.342	0.404	0.103	0.132	0.309	0.441	0.144	0.261	0.211
14	0.174	0.361	0.293	-0.024	-0.015	0.451	0.335	-0.032	0.057	0.000
15	0.224	0.562	0.210	0.459	0.432	0.066	-0.054	0.113	0.227	0.000
16	0.370	0.290	0.317	0.391	0.382	0.161	-0.083	-0.048	-0.019	-0.000
17	0.323	0.467	0.370	0.416	0.414	0.213	-0.018	-0.050	-0.010	-0.000
18	0.337	0.275	0.194	0.275	0.382	0.112	0.123	-0.024	0.017	-0.000
19	0.327	0.360	0.247	0.344	0.373	0.220	-0.049	-0.045	-0.017	-0.000
20	0.200	0.595	0.415	0.531	0.542	0.264	0.021	-0.033	0.118	0.000
21	0.240	0.598	0.314	0.505	0.647	0.111	-0.051	0.074	0.195	0.000
22	0.287	0.581	0.353	0.499	0.640	0.214	0.044	-0.023	0.147	0.000
23	0.534	0.562	0.714	0.275	0.551	0.523	0.158	-0.258	-0.159	-0.111

24	0.529	0.611	0.688	0.315	0.154	0.012	0.215	-0.273	-0.172	-0.211
25	0.460	0.520	0.534	0.299	0.215	0.475	0.142	-0.206	-0.073	-0.000
26	0.525	0.570	0.635	0.212	0.210	0.529	0.177	-0.233	-0.110	-0.111
27	0.545	0.642	0.701	0.175	0.215	0.411	0.208	-0.231	-0.153	-0.000
28	0.505	0.603	0.525	0.445	0.314	0.445	0.174	-0.142	-0.044	-0.000
29	0.364	0.616	0.445	0.525	0.371	0.472	0.117	-0.012	0.120	0.000
30	0.295	0.536	0.271	0.425	0.377	0.149	-0.012	0.046	0.128	0.000
31	0.462	0.724	0.511	0.494	0.309	0.110	0.045	-0.061	0.067	-0.000
32	0.649	0.427	0.256	0.316	0.217	0.445	-0.011	-0.056	-0.195	-0.000
33	0.450	0.371	0.197	0.374	0.441	0.215	-0.120	0.245	-0.125	-0.000
34	0.637	0.417	0.478	0.186	0.371	0.315	0.117	-0.178	-0.234	-0.000
35	0.414	0.431	0.461	0.317	0.162	0.114	-0.237	-0.378	-0.328	-0.000
36	0.425	0.522	0.442	0.272	0.218	0.257	-0.258	-0.365	-0.521	-0.000
37	0.334	0.601	0.510	0.240	0.342	0.240	-0.152	-0.112	-0.200	-0.000
38	0.214	0.475	0.505	0.144	0.184	0.111	-0.111	-0.410	-0.273	-0.000
39	0.471	0.452	0.452	0.242	0.184	0.111	-0.312	-0.460	-0.460	-0.000
40	0.779	0.515	0.540	0.245	0.094	0.402	-0.110	-0.294	-0.363	-0.000
41	1.000	0.477	0.553	0.222	0.170	0.402	-0.029	-0.257	-0.234	-0.000
42	0.477	1.000	0.704	0.503	0.497	0.234	0.038	-0.132	0.044	-0.000
43	0.552	0.704	1.000	0.209	0.254	0.312	0.070	-0.316	-0.192	-0.000
44	0.222	0.502	0.209	1.000	0.502	0.179	-0.011	0.102	0.150	0.000
45	0.170	0.467	0.254	0.502	1.000	0.274	-0.050	0.162	0.774	0.000
46	0.402	0.294	0.412	0.178	0.074	1.000	0.431	0.142	-0.007	-0.000
47	-0.029	0.042	0.070	-0.001	-0.050	0.431	1.000	0.321	0.424	0.000
48	-0.257	-0.132	-0.216	0.102	0.162	0.142	0.321	1.000	0.712	0.000
49	-0.234	0.044	-0.132	0.150	0.274	-0.007	0.424	0.712	1.000	0.781
50	-0.405	-0.052	-0.245	0.044	0.156	-0.026	0.424	0.673	0.762	1.000
51	-0.334	0.000	-0.170	0.229	0.246	-0.053	0.235	0.585	0.819	0.781
52	-0.210	0.298	-0.040	0.323	0.511	0.002	0.315	0.572	0.722	0.781
53	-0.304	0.017	-0.218	0.125	0.273	0.041	0.590	0.677	0.825	0.781
54	-0.437	0.032	-0.045	0.127	0.232	-0.209	-0.029	0.276	0.404	0.781
55	-0.144	0.345	0.100	0.346	0.420	-0.110	0.106	0.077	0.261	0.781
56	-0.091	0.223	0.102	0.402	0.518	0.013	0.027	0.235	0.346	0.781
57	-0.425	-0.062	-0.222	0.091	0.165	-0.011	0.456	0.607	0.654	0.741
58	-0.213	0.090	0.021	0.156	0.214	-0.521	-0.525	-0.269	-0.183	-0.221
59	-0.102	0.171	0.070	0.370	0.222	-0.423	-0.460	-0.201	-0.060	-0.121
60	-0.212	0.020	0.026	0.101	0.149	-0.465	-0.475	-0.252	-0.137	-0.241
61	-0.141	0.223	0.052	0.263	0.312	-0.425	-0.465	-0.189	-0.042	-0.101
62	-0.207	0.270	0.159	0.182	0.317	-0.458	-0.475	-0.231	-0.048	-0.111
63	-0.172	0.250	0.037	0.250	0.342	-0.275	-0.229	-0.141	-0.016	-0.111
64	-0.203	-0.010	0.032	0.007	0.135	-0.577	-0.536	-0.326	-0.210	-0.271
65	-0.145	0.201	0.120	0.215	0.314	-0.463	-0.512	-0.236	-0.082	-0.161
66	-0.462	0.024	-0.154	0.162	0.275	-0.262	-0.077	0.407	0.527	0.491
67	-0.062	0.126	0.012	0.270	0.255	-0.251	-0.272	-0.013	0.016	-0.551
68	-0.504	-0.206	-0.276	-0.130	-0.053	-0.372	0.012	0.460	0.478	0.441
69	-0.107	-0.147	-0.216	0.008	0.137	-0.422	-0.420	0.032	-0.079	-0.000
70	-0.182	0.055	-0.011	0.008	0.232	-0.423	0.415	0.090	0.033	-0.000
71	-0.192	-0.264	-0.252	0.017	0.041	-0.442	-0.446	-0.309	-0.109	-0.071
72	0.013	0.042	-0.145	0.201	0.265	-0.110	-0.404	0.034	-0.009	-0.131
73	-0.076	-0.045	-0.102	0.145	0.249	-0.110	-0.453	-0.075	-0.181	-0.191
74	-0.222	-0.141	-0.126	0.126	0.114	-0.266	-0.150	0.408	0.236	0.221
75	-0.401	-0.107	-0.276	0.010	0.087	-0.400	-0.024	0.426	0.336	0.391
76	-0.360	-0.111	-0.144	0.047	0.111	-0.415	-0.313	0.042	0.050	0.211
77	-0.554	-0.112	-0.272	0.118	0.111	-0.411	-0.047	0.261	0.433	0.441
78	-0.124	0.117	0.055	0.234	0.211	-0.111	-0.475	-0.149	-0.110	-0.141
79	0.000	0.144	0.000	0.214	0.211	-0.111	-0.111	0.014	-0.052	-0.111

	61	62	63	64	65	66	67	68	69	70
1	-0.004	-0.171	-0.349	-0.527	-0.704	-0.881	-1.058	-1.235	-1.412	-1.589
2	-0.200	-0.196	-0.241	-0.337	-0.413	-0.497	-0.581	-0.665	-0.749	-0.833
3	-0.214	-0.146	-0.205	-0.274	-0.322	-0.375	-0.441	-0.517	-0.593	-0.669
4	-0.200	-0.202	-0.165	-0.217	-0.277	-0.324	-0.366	-0.412	-0.459	-0.506
5	-0.010	-0.099	0.037	-0.070	-0.070	0.297	0.070	0.211	0.005	0.015
6	-0.440	-0.421	-0.361	-0.280	-0.424	-0.241	-0.119	0.070	0.115	-0.110
7	-0.224	-0.302	-0.246	-0.330	-0.310	0.179	-0.123	0.264	-0.019	-0.015
8	-0.424	-0.422	-0.349	-0.457	-0.428	0.029	-1.300	0.137	-0.149	-0.218
9	0.227	0.241	0.237	0.184	0.214	0.715	0.190	0.431	0.252	0.417
10	0.062	0.058	-0.020	-0.041	0.067	0.212	0.005	-0.006	-0.197	0.001
11	-0.222	-0.181	-0.290	-0.212	-0.284	-0.001	-0.227	0.003	-0.391	-0.341
12	-0.215	-0.177	-0.253	-0.204	-0.221	-0.172	-0.177	-0.184	-0.333	-0.356
13	-0.185	-0.189	-0.164	-0.194	-0.210	0.136	-0.184	0.050	-0.326	-0.211
14	-0.250	-0.102	-0.159	-0.200	-0.248	-0.045	-0.239	-0.114	-0.370	-0.211
15	0.255	0.262	0.253	0.045	0.274	0.228	0.322	-0.132	0.112	0.319
16	0.140	0.063	0.157	-0.044	0.090	-0.131	0.155	-0.192	0.020	0.045
17	0.161	0.063	0.176	-0.016	0.065	-0.003	0.183	-0.217	-0.054	0.022
18	0.125	0.029	0.080	-0.013	0.024	-0.043	0.289	-0.108	-0.129	-0.017
19	0.126	0.062	0.217	-0.075	0.126	0.006	0.139	-0.275	0.048	0.090
20	0.203	0.175	0.292	0.002	0.228	0.133	0.225	-0.307	-0.086	0.111
21	0.255	0.274	0.409	0.017	0.335	0.245	0.338	-0.110	0.329	0.278
22	0.334	0.214	0.319	0.062	0.212	0.197	0.295	-0.136	-0.075	0.191
23	-0.010	-0.075	0.001	-0.135	-0.059	-0.152	-0.041	-0.340	-0.327	-0.023
24	-0.105	-0.141	-0.082	-0.202	-0.145	-0.246	-0.082	0.215	-0.385	-0.174
25	0.025	-0.023	0.027	-0.132	-0.039	-0.105	0.011	-0.299	-0.295	-0.164
26	-0.013	-0.021	-0.015	-0.114	-0.040	-0.153	-0.030	-0.245	-0.330	-0.202
27	-0.092	-0.130	-0.062	-0.233	-0.143	-0.237	-0.042	-0.394	-0.400	-0.252
28	0.017	-0.066	-0.036	-0.132	-0.046	-0.114	0.002	-0.375	-0.265	-0.131
29	0.220	0.158	0.262	-0.022	0.190	0.049	0.260	-0.192	0.335	0.135
30	0.254	0.165	0.227	0.049	0.164	0.200	0.235	-0.104	0.008	0.182
31	0.201	0.105	0.228	-0.019	0.111	0.003	0.265	-0.216	-0.150	0.065
32	-0.115	-0.172	-0.034	-0.317	-0.149	-0.322	0.031	-0.436	-0.114	-0.129
33	0.057	-0.005	0.097	-0.172	-0.012	-0.100	0.212	-0.232	0.013	-0.022
34	-0.200	-0.232	-0.142	-0.347	-0.235	-0.369	-0.034	-0.275	-0.262	-0.155
35	0.250	0.256	0.242	0.135	0.258	-0.173	0.178	-0.305	-0.082	0.055

36	0.344	0.317	0.321	0.201	0.390	-0.104	0.231	-0.383	-0.015	0.110
37	0.466	0.402	0.412	0.202	0.431	0.073	0.232	-0.280	-0.127	0.106
38	0.360	0.237	0.310	0.304	0.360	-0.012	0.127	-0.286	-0.119	0.003
39	0.302	0.260	0.375	0.156	0.302	-0.171	0.096	-0.115	0.004	0.110
40	-0.150	-0.020	-0.122	-0.239	-0.101	-0.404	0.022	-0.451	-0.011	0.110
41	-0.161	-0.207	-0.177	-0.203	-0.135	-0.462	-0.040	-0.504	-0.117	-0.182
42	0.223	0.270	0.250	-0.012	0.201	0.124	0.196	-0.296	-0.164	-0.011
43	0.057	0.159	0.047	0.032	0.138	-0.154	0.012	-0.276	-0.216	-0.091
44	0.292	0.162	0.390	0.007	0.235	0.162	0.275	-0.130	0.008	0.208
45	0.412	0.317	0.392	0.122	0.314	0.375	0.255	-0.053	0.117	0.332
46	-0.423	-0.452	-0.360	-0.577	-0.464	-0.362	-0.251	-0.372	-0.422	-0.424
47	-0.465	-0.475	-0.399	-0.535	-0.512	-0.077	-0.292	0.012	-0.420	-0.415
48	-0.189	-0.231	-0.141	-0.236	-0.236	0.407	-0.013	0.460	0.032	0.090
49	-0.042	-0.055	-0.016	-0.216	-0.092	0.327	0.016	0.478	-0.079	0.033
50	-0.107	-0.139	-0.064	-0.218	-0.165	0.498	-0.057	0.443	-0.089	0.046
51	0.012	-0.047	0.047	-0.202	-0.061	0.574	0.070	0.443	-0.027	0.140
52	0.178	0.076	0.210	-0.044	0.102	0.515	0.222	0.302	-0.049	0.176
53	-0.002	-0.113	-0.025	-0.251	-0.106	0.442	0.037	0.393	-0.144	0.000
54	0.429	0.451	0.457	0.461	0.515	0.582	0.191	0.349	0.131	0.338
55	0.363	0.275	0.450	0.215	0.242	0.342	0.211	0.027	0.111	0.204
56	0.296	0.222	0.305	0.070	0.211	0.395	0.221	0.145	0.050	0.248
57	-0.040	-0.059	0.064	-0.121	-0.065	0.526	-0.051	0.430	-0.110	-0.013
58	0.729	0.741	0.662	0.749	0.762	0.355	0.595	0.259	0.317	0.429
59	0.767	0.648	0.749	0.679	0.711	0.421	0.524	0.130	0.280	0.380
60	0.742	0.628	0.599	0.797	0.747	0.245	0.454	0.177	0.295	0.435
61	1.002	0.812	0.727	0.745	0.756	0.427	0.470	0.152	0.237	0.547
62	0.312	1.000	0.472	0.761	0.761	0.376	0.401	0.085	0.321	0.546
63	0.727	0.673	1.000	0.604	0.713	0.440	0.371	0.022	0.111	0.406
64	0.745	0.761	0.604	1.000	0.797	0.403	0.333	0.182	0.258	0.467
65	0.756	0.761	0.730	0.797	1.000	0.406	0.386	0.063	0.340	0.489
66	0.437	0.376	0.440	0.408	0.406	1.000	0.240	0.400	0.276	0.413
67	0.470	0.401	0.371	0.333	0.335	0.240	1.000	0.252	0.136	0.263
68	0.152	0.015	0.022	0.192	0.062	0.600	0.252	1.000	0.101	0.151
69	0.207	0.321	0.252	0.258	0.343	0.275	0.135	0.101	1.000	0.584
70	0.547	0.546	0.406	0.467	0.432	0.413	0.262	0.151	0.583	1.000
71	0.799	0.362	0.352	0.479	0.434	0.291	0.169	0.109	0.592	0.660
72	0.404	0.406	0.202	0.292	0.387	0.152	0.274	-0.081	0.454	0.669
73	0.407	0.426	0.312	0.350	0.461	0.190	0.276	-0.006	0.510	0.604
74	0.256	0.315	0.101	0.156	0.115	0.393	0.292	0.316	0.404	0.326
75	0.256	0.262	0.115	0.115	0.115	0.509	0.244	0.501	0.199	0.114
76	0.504	0.426	0.468	0.450	0.476	0.492	0.396	0.292	0.369	0.291
77	0.407	0.311	0.400	0.436	0.466	0.413	0.345	0.504	0.215	0.311
78	0.732	0.454	0.500	0.750	0.767	0.413	0.425	0.149	0.330	0.530
79	0.517	0.511	0.400	0.492	0.492	0.413	0.453	0.008	0.344	0.439

	71	72	73	74	75	76	77	78	79
1	-0.101	-0.070	-0.257	-0.184	-0.071	-0.151	-0.122	-0.010	0.292
2	-0.026	-0.047	-0.112	-0.077	-0.071	-0.077	-0.147	-0.303	-0.186
3	0.001	0.000	-0.001	0.001	0.027	-0.113	-0.067	-0.261	-0.180
4	0.047	0.035	0.001	0.007	0.000	-0.137	-0.212	-0.162	-0.058
5	-0.007	0.041	-0.057	0.001	0.121	-0.073	0.213	-0.077	0.056
6	-0.027	-0.001	-0.070	0.111	0.000	-0.158	-0.126	-0.280	-0.105
7	-0.028	-0.020	-0.060	-0.007	0.100	-0.127	0.117	-0.200	-0.117
8	-0.277	-0.227	-0.206	-0.007	0.079	-0.204	0.000	-0.220	-0.345
9	0.207	0.193	0.133	0.045	0.000	0.251	0.005	0.249	0.249
10	-0.001	-0.055	0.177	0.000	0.000	-0.019	0.180	0.023	0.099
11	-0.343	-0.334	-0.365	-0.240	-0.132	-0.177	-0.141	-0.201	-0.364

12	-0.404	-0.298	-0.305	-0.374	-0.284	-0.257	-0.306	-0.258	-0.280
13	-0.390	-0.267	-0.269	-0.107	-0.077	-0.251	-0.044	-0.227	-0.182
14	-0.347	-0.283	-0.354	-0.074	-0.005	-0.324	-0.067	-0.277	-0.219
15	0.064	0.236	0.174	0.202	-0.032	0.026	0.206	0.218	0.331
16	-0.054	0.077	0.074	0.044	-0.142	-0.031	-0.095	0.080	0.276
17	-0.145	0.010	0.009	-0.053	-0.116	-0.049	-0.062	0.075	0.301
18	-0.146	0.023	-0.028	-0.022	-0.100	-0.069	-0.044	0.049	0.279
19	0.070	0.174	0.100	0.156	0.114	-0.102	-0.102	0.058	0.087
20	-0.046	0.131	0.041	-0.004	0.113	-0.020	0.041	0.167	0.221
21	0.053	0.241	0.148	0.101	0.016	0.097	0.230	0.282	0.399
22	-0.065	0.159	0.077	-0.137	-0.104	-0.076	0.124	0.152	0.312
23	-0.353	-0.157	-0.175	-0.282	-0.013	-0.071	-0.291	-0.081	-0.075
24	-0.378	-0.193	-0.040	-0.111	-0.017	-0.319	-0.006	-0.134	-0.125
25	-0.217	-0.126	-0.170	-0.204	-0.100	-0.226	-0.248	-0.000	0.052
26	-0.352	-0.150	-0.014	-0.255	-0.382	-0.224	-0.113	-0.102	-0.028
27	-0.404	-0.192	-0.261	-0.441	-0.446	-0.354	-0.377	-0.142	-0.069
28	-0.300	-0.000	-0.131	-0.273	-0.202	-0.228	-0.287	-0.044	-0.044
29	-0.111	-0.133	0.007	-0.017	-0.100	-0.074	0.025	0.126	0.241
30	-0.064	0.143	0.015	0.000	-0.001	-0.010	0.156	0.154	0.354
31	-0.176	0.082	-0.006	-0.052	-0.001	-0.145	-0.078	0.066	0.209
32	-0.168	0.026	-0.028	-0.011	-0.001	-0.291	-0.398	-0.158	0.025
33	-0.025	0.170	0.116	0.107	-0.070	-0.110	-0.090	0.033	0.251
34	-0.209	-0.113	-0.156	-0.007	-0.007	-0.351	-0.461	-0.206	-0.079
35	-0.071	0.050	0.132	-0.100	-0.107	0.040	-0.101	0.277	0.300
36	-0.074	-0.076	0.120	-0.109	-0.001	0.055	-0.105	0.285	0.351
37	-0.082	0.057	0.135	-0.209	-0.100	0.091	-0.052	0.356	0.300
38	-0.024	-0.015	0.094	-0.256	-0.200	0.073	-0.149	0.314	0.173
39	-0.053	0.066	0.162	-0.105	-0.004	0.042	-0.271	0.220	0.219
40	-0.191	0.045	-0.007	-0.226	-0.425	-0.324	-0.504	-0.094	0.126
41	-0.183	0.013	-0.016	-0.222	-0.401	-0.360	-0.534	-0.154	0.060
42	-0.204	0.043	-0.006	-0.141	-0.153	-0.110	-0.130	0.117	0.244
43	-0.258	-0.145	-0.100	-0.100	-0.200	-0.100	-0.279	0.035	0.085
44	0.017	0.211	0.140	0.126	0.000	0.042	0.118	0.234	0.294
45	0.041	0.295	0.240	0.104	0.037	0.099	0.300	0.314	0.423
46	-0.442	-0.280	-0.330	-0.206	-0.400	-0.415	-0.400	-0.401	-0.243
47	-0.446	-0.074	-0.499	-0.160	-0.001	-0.313	-0.047	-0.476	-0.387
48	-0.009	0.004	-0.075	0.400	0.426	0.042	0.381	-0.148	0.014
49	-0.100	-0.004	-0.152	0.200	0.104	0.050	0.433	-0.119	-0.053
50	-0.072	-0.107	-0.194	0.285	0.306	0.018	0.456	-0.162	-0.060
51	-0.047	-0.040	-0.156	0.300	0.384	0.057	0.504	-0.095	0.004
52	-0.043	0.082	-0.011	0.372	0.200	0.058	0.486	0.078	0.183
53	-0.154	-0.131	-0.211	0.301	0.321	0.056	0.471	-0.137	-0.063
54	0.247	0.044	0.122	0.250	0.325	0.441	0.582	0.356	0.351
55	0.078	0.096	0.056	0.193	0.205	0.319	0.292	0.267	0.278
56	-0.004	0.170	0.165	0.217	0.195	0.110	0.300	0.208	0.281
57	-0.082	-0.170	-0.192	0.308	0.404	0.170	0.474	-0.089	-0.101
58	0.302	0.258	0.427	0.217	0.309	0.589	0.444	0.751	0.577
59	0.403	0.315	0.552	0.211	0.204	0.546	0.491	0.553	0.465
60	0.401	0.332	0.537	0.260	0.292	0.641	0.430	0.742	0.422
61	0.390	0.404	0.487	0.257	0.255	0.594	0.463	0.732	0.517
62	0.352	0.406	0.424	0.210	0.212	0.424	0.382	0.653	0.513
63	0.353	0.293	0.312	0.191	0.119	0.443	0.402	0.580	0.491
64	0.479	0.290	0.450	0.158	0.225	0.560	0.426	0.756	0.492
65	0.439	0.267	0.441	0.194	0.233	0.576	0.464	0.767	0.525
66	0.291	0.153	0.190	0.303	0.502	0.492	0.680	0.368	0.247
67	0.109	0.294	0.276	0.202	0.246	0.386	0.345	0.425	0.453
68	0.102	-0.051	-0.006	0.316	0.521	0.292	0.504	0.149	0.060
69	0.592	0.464	0.510	0.407	0.180	0.363	0.315	0.330	0.344
70	0.660	0.669	0.604	0.326	0.317	0.291	0.502	0.530	0.430
71	1.000	0.511	0.530	0.420	0.253	0.425	0.256	0.474	0.297

72	0.511	1.000	0.405	0.319	0.120	0.144	0.263	0.455	0.326
73	0.530	0.705	1.000	0.412	0.100	0.252	0.258	0.461	0.405
74	0.420	0.001	0.410	1.000	0.104	0.000	0.344	0.170	0.151
75	0.340	0.100	0.100	0.310	1.000	0.400	0.100	0.258	0.200
76	0.420	0.100	0.300	0.210	0.400	1.000	0.500	0.533	0.400
77	0.400	0.100	0.200	0.240	0.400	0.500	1.000	0.400	0.400
78	0.400	0.100	0.200	0.170	0.400	0.500	0.400	1.000	0.500
79	0.400	0.100	0.200	0.100	0.400	0.500	0.400	0.500	1.000

APPENDIX M

CORRELATION MATRIX OF NON-NATIVE STUDENT DATA

1	1.000	-0.267	-0.069	-0.166	-0.077	0.201	0.034	-0.015	0.051	0.0
2	-0.267	1.000	0.012	0.174	-0.137	-0.137	-0.027	0.025	-0.015	0.1
3	-0.069	0.012	1.000	-0.137	-0.137	-0.137	-0.137	-0.027	-0.139	0.
4	-0.166	0.174	-0.137	1.000	-0.137	-0.137	-0.137	-0.027	0.047	-0.3
5	-0.077	-0.027	-0.139	-0.137	1.000	-0.137	-0.137	-0.027	-0.171	0.
6	0.001	-0.035	-0.035	0.174	-0.137	1.000	-0.137	-0.050	0.125	0.
7	0.034	-0.020	0.140	-0.137	0.112	-0.137	1.000	-0.053	0.005	-0.0
8	-0.015	0.025	-0.003	0.053	-0.077	-0.053	-0.053	1.000	0.037	0.2
9	0.051	-0.015	-0.137	-0.053	-0.137	0.125	0.025	0.057	1.000	0.2
10	0.004	0.111	0.009	-0.137	0.111	0.025	-0.027	0.051	0.204	1.0
11	-0.003	0.121	0.015	-0.137	0.111	0.025	-0.125	-0.031	0.128	0.2
12	-0.023	0.041	-0.026	-0.037	0.111	0.102	-0.009	0.119	0.201	0.3
13	0.039	0.026	-0.044	-0.137	0.102	0.102	-0.024	0.049	0.194	0.3
14	0.029	0.009	-0.147	0.156	-0.137	0.041	-0.123	-0.056	0.055	-0.3
15	-0.022	-0.040	-0.057	0.053	-0.053	-0.112	0.132	-0.124	0.042	-0.3
16	-0.036	-0.036	0.075	-0.036	-0.036	-0.036	0.034	-0.136	-0.110	-0.4
17	-0.079	-0.102	-0.111	-0.111	-0.111	-0.111	0.034	-0.089	-0.036	-0.3
18	-0.020	-0.004	-0.022	-0.037	-0.037	-0.037	-0.035	-0.035	-0.036	-0.3
19	-0.013	0.020	0.024	-0.115	0.045	-0.037	-0.009	-0.050	-0.041	-0.0
20	-0.074	0.121	0.110	-0.037	0.045	-0.037	-0.034	-0.034	-0.148	-0.3
21	-0.002	0.005	-0.041	0.041	-0.041	-0.102	-0.031	0.119	0.051	0.1
22	0.021	-0.022	0.076	-0.037	-0.037	-0.020	0.027	0.112	0.018	0.2
23	-0.001	-0.122	0.112	-0.037	0.045	0.150	0.158	0.010	0.020	0.1
24	0.047	0.014	0.062	0.111	-0.037	0.130	0.036	-0.153	-0.002	-0.3
25	-0.014	0.061	0.089	-0.043	0.110	-0.045	-0.009	-0.000	0.038	0.3
26	-0.049	0.115	0.110	-0.157	0.074	-0.022	-0.042	0.030	0.074	0.1
27	-0.040	-0.025	0.044	-0.137	0.094	-0.064	0.103	0.001	-0.075	0.0
28	0.002	-0.027	-0.047	-0.027	0.027	0.084	0.134	-0.034	0.144	0.1
29	-0.032	-0.160	0.037	0.035	0.031	0.021	0.021	0.113	0.031	0.0
30	0.124	-0.113	0.034	-0.137	0.036	0.053	0.077	0.130	0.144	0.2
31	0.0	-0.067	0.021	0.027	0.001	0.241	0.1	-0.034	-0.031	0.1
32	0.049	-0.024	-0.022	-0.040	0.051	-0.053	0.115	-0.056	-0.001	0.1
33	-0.001	0.034	-0.057	-0.037	0.045	0.090	0.054	-0.119	0.031	0.1
34	-0.029	0.101	0.044	-0.037	0.045	0.043	-0.127	-0.154	-0.031	0.1
35	0.068	-0.025	0.037	-0.134	0.045	0.047	-0.024	0.045	-0.035	0.1
36	0.077	0.031	0.043	0.041	0.037	-0.140	-0.127	0.009	0.022	0.1
37	-0.067	-0.012	0.037	-0.137	0.045	0.045	0.047	0.055	-0.033	0.1
38	0.007	0.031	0.174	-0.037	0.045	-0.037	0.123	-0.013	-0.115	0.1
39	-0.034	0.032	0.134	-0.137	0.045	0.014	-0.124	0.021	-0.042	0.1
40	0.015	-0.131	-0.130	0.134	-0.137	0.045	-0.134	-0.039	0.130	-0.1
41	0.016	-0.133	-0.030	-0.037	-0.137	0.045	-0.125	-0.051	-0.045	-0.1
42	0.105	0.020	-0.035	-0.037	-0.115	-0.013	0.047	-0.061	-0.115	-0.1
43	0.021	0.041	-0.037	0.032	-0.105	-0.036	0.055	-0.015	-0.034	0.0
44	-0.040	-0.002	-0.030	-0.037	-0.030	-0.050	-0.120	0.057	0.155	0.0
45	-0.020	-0.001	-0.030	-0.105	0.041	-0.020	0.030	-0.014	0.027	0.0
46	0.014	0.104	-0.002	0.016	-0.002	-0.040	0.007	-0.014	0.150	0.0
47	-0.009	0.157	0.002	0.134	0.014	-0.017	-0.004	-0.012	0.152	-0.0
48	0.016	0.034	-0.022	0.036	0.034	-0.136	-0.136	-0.061	-0.003	0.0
49	-0.004	-0.035	-0.068	-0.036	0.002	-0.136	-0.050	-0.075	-0.071	-0.1
50	-0.016	0.024	-0.048	-0.036	-0.036	0.065	-0.111	0.128	0.025	0.0
51	-0.045	0.001	-0.018	-0.114	-0.036	-0.024	0.024	-0.027	0.013	-0.0
52	-0.050	-0.067	0.025	0.047	-0.036	-0.075	0.047	-0.110	0.029	-0.0
53	0.012	-0.042	0.022	-0.055	-0.013	0.031	0.012	-0.031	-0.002	-0.1
54	-0.140	-0.115	0.117	0.037	-0.101	-0.076	-0.032	0.058	0.034	-0.1
55	0.075	-0.040	0.045	-0.107	0.102	0.112	0.045	-0.065	0.031	0.0
56	-0.177	-0.070	-0.010	-0.060	-0.051	0.040	-0.025	-0.150	0.001	0.1
57	-0.110	0.002	0.021	-0.040	0.047	-0.040	0.112	0.012	-0.039	0.0
58	0.001	-0.142	-0.045	0.067	-0.131	0.005	-0.056	0.072	-0.019	-0.0
59	-0.044	-0.055	-0.076	-0.073	0.047	0.013	0.025	-0.002	0.102	0.1

60	0.005	-0.002	-0.039	0.049	-0.140	0.000	0.041	0.234	0.100	0.0
61	-0.000	-0.004	-0.007	0.049	0.011	-0.073	0.045	-0.122	-0.115	-0.0
62	-0.030	0.173	-0.030	0.030	-0.067	-0.035	-0.111	0.019	-0.115	0.0
63	-0.071	0.160	-0.107	0.005	-0.107	0.031	0.122	-0.140	-0.035	0.0
64	0.100	0.094	-0.127	-0.001	-0.037	0.030	0.033	0.073	0.035	0.0
65	0.003	0.034	-0.010	-0.060	0.010	0.016	-0.130	0.043	-0.000	0.0
66	0.043	0.021	0.000	0.078	-0.036	0.000	-0.021	0.046	0.105	0.0
67	-0.017	-0.001	-0.043	-0.010	-0.043	0.130	-0.047	-0.110	0.140	-0.0
68	-0.051	0.120	-0.021	-0.030	0.000	-0.031	-0.020	-0.035	0.064	0.0
69	-0.000	-0.002	-0.010	0.030	-0.130	0.030	-0.030	-0.035	0.100	0.0
70	-0.000	-0.071	-0.030	-0.030	-0.130	0.130	0.030	-0.032	0.115	-0.0
71	0.001	0.030	0.030	0.030	-0.130	0.030	-0.030	-0.035	0.030	0.0
72	-0.041	-0.030	0.030	-0.030	0.130	-0.130	0.030	-0.037	0.030	0.1
73	-0.030	-0.030	-0.030	0.030	0.030	0.030	0.030	-0.030	-0.040	0.0
74	0.030	-0.030	0.030	-0.030	0.030	0.030	0.030	-0.030	-0.030	-0.0
75	0.030	-0.030	0.030	-0.030	0.030	0.030	0.030	-0.030	-0.030	-0.0
76	0.030	-0.030	0.030	-0.030	0.030	0.030	0.030	-0.030	-0.030	-0.0
77	-0.030	-0.030	-0.030	-0.030	-0.030	-0.030	-0.030	-0.030	-0.030	-0.0

	11	12	13	14	15	16	17	18	19	20
1	-0.021	-0.021	-0.021	-0.021	-0.021	-0.021	-0.021	-0.020	-0.013	-0.007
2	0.126	0.041	0.126	0.041	-0.041	-0.036	-0.102	-0.036	0.040	0.121
3	0.015	-0.016	-0.016	-0.147	-0.034	0.074	-0.011	-0.022	0.009	0.110
4	-0.041	-0.007	-0.030	0.158	0.033	-0.006	-0.014	-0.035	-0.115	-0.093
5	0.130	0.118	0.101	-0.140	-0.065	-0.006	-0.019	-0.049	0.045	0.083
6	0.035	0.102	0.146	0.001	-0.113	-0.062	0.013	-0.027	-0.087	-0.001
7	-0.125	-0.005	-0.054	-0.133	0.097	0.014	0.137	-0.005	-0.009	-0.009
8	-0.031	0.110	0.000	-0.016	-0.124	-0.124	0.045	-0.060	-0.000	-0.051
9	0.129	0.201	0.194	0.045	0.043	-0.019	-0.046	0.016	-0.041	-0.104
10	0.727	0.551	0.616	-0.096	-0.075	-0.140	-0.025	-0.045	-0.080	-0.151
11	1.000	0.532	0.617	-0.054	0.026	-0.056	-0.121	-0.048	-0.099	-0.021
12	0.582	1.000	0.769	-0.106	-0.147	-0.041	0.035	-0.011	0.024	0.045
13	0.617	0.789	1.000	-0.031	-0.110	-0.000	0.030	-0.055	-0.006	0.033
14	-0.054	-0.100	-0.051	1.000	-0.033	-0.006	0.037	0.035	0.040	-0.011
15	0.005	-0.147	-0.110	-0.033	1.000	0.376	-0.352	0.100	0.047	-0.000
16	-0.056	-0.001	-0.059	-0.055	0.376	1.000	-0.191	0.300	0.368	0.299
17	-0.121	0.004	0.050	-0.067	-0.352	-0.191	1.000	-0.197	-0.237	-0.240
18	-0.047	-0.011	-0.055	0.035	0.100	0.300	-0.197	1.000	0.332	0.200
19	-0.009	0.024	-0.006	0.040	0.047	0.369	-0.237	0.332	1.000	0.385
20	-0.029	0.046	0.000	-0.015	-0.003	0.294	-0.207	0.207	0.325	1.000
21	-0.022	0.026	0.087	0.000	-0.234	-0.253	0.336	-0.243	-0.232	-0.100
22	0.177	0.044	0.144	-0.135	-0.075	0.013	0.089	0.001	-0.010	0.121
23	0.054	0.101	0.153	-0.137	-0.172	-0.147	0.059	-0.091	-0.147	0.085
24	-0.067	-0.071	-0.067	0.000	-0.155	-0.067	0.137	-0.120	-0.119	0.013
25	0.010	0.021	-0.037	0.020	-0.111	-0.127	0.099	-0.108	-0.054	-0.000
26	0.053	0.041	-0.000	0.051	-0.104	-0.126	0.112	-0.105	-0.070	-0.045
27	0.047	0.106	0.052	-0.111	-0.121	-0.045	-0.107	-0.010	-0.111	-0.000
28	-0.027	0.127	0.112	0.004	-0.068	-0.012	0.026	-0.049	-0.142	-0.070
29	0.059	0.050	0.072	-0.127	-0.109	0.051	0.046	0.002	0.013	0.021
30	0.132	0.127	0.152	0.074	-0.034	0.009	0.083	0.026	-0.124	-0.140
31	0.165	0.077	0.001	-0.154	0.040	-0.022	-0.115	0.068	-0.022	-0.060
32	0.028	0.002	0.070	-0.016	0.090	0.152	-0.104	0.110	0.146	0.030
33	0.040	-0.027	-0.050	-0.067	-0.109	0.004	0.009	0.022	-0.149	0.130
34	0.001	0.022	0.122	-0.070	-0.104	0.051	0.200	-0.073	0.076	0.100
35	0.052	-0.047	0.015	-0.112	0.013	0.002	0.000	0.047	0.030	0.000
36	0.132	0.102	0.021	-0.034	-0.016	-0.016	-0.021	0.040	-0.017	0.083
37	-0.011	-0.024	-0.061	-0.145	-0.056	-0.050	-0.034	0.017	0.097	0.040
38	0.100	-0.014	0.015	-0.149	0.005	-0.061	-0.032	0.044	0.003	-0.000
39	0.070	-0.046	-0.034	0.000	-0.070	0.031	0.106	0.024	0.010	-0.000
40	-0.001	-0.063	-0.057	0.152	0.142	0.067	-0.024	0.190	0.037	0.000
41	-0.004	-0.140	-0.100	0.030	-0.034	0.064	-0.073	0.097	0.156	0.000
42	-0.047	-0.124	-0.030	-0.058	-0.001	-0.002	-0.037	-0.070	-0.040	-0.040
43	0.167	-0.016	0.024	-0.123	0.061	0.126	-0.023	0.030	0.047	0.000
44	0.081	0.140	0.120	0.031	-0.166	-0.052	-0.017	0.082	-0.054	0.110
45	0.050	0.052	0.081	0.017	-0.017	0.054	-0.035	0.174	0.075	0.000
46	0.024	0.009	0.061	0.102	0.201	0.089	-0.078	0.085	0.155	0.021
47	-0.040	-0.061	-0.072	0.131	-0.013	-0.000	-0.046	0.003	-0.070	0.000
48	0.005	0.029	0.062	0.050	0.051	0.107	-0.037	0.087	0.078	0.151
49	-0.170	-0.000	-0.129	0.065	0.177	0.053	0.014	-0.070	0.029	0.000
50	0.060	0.111	0.088	-0.024	-0.013	0.014	-0.025	0.029	-0.047	-0.040
51	-0.084	-0.080	-0.055	-0.190	0.215	0.114	-0.161	0.066	0.153	-0.010
52	0.025	-0.061	-0.051	-0.163	-0.042	0.079	0.026	0.040	-0.000	0.000
53	-0.054	0.038	-0.076	-0.105	-0.102	0.081	0.020	0.058	0.103	0.000
54	-0.086	-0.130	-0.105	0.021	0.037	-0.005	0.110	-0.009	-0.023	-0.140
55	0.011	0.057	0.081	-0.015	-0.000	0.064	-0.126	0.067	0.062	0.141
56	0.122	0.036	0.121	0.107	-0.019	-0.014	-0.070	-0.008	-0.002	-0.085
57	0.085	0.017	-0.004	-0.122	0.001	0.002	-0.035	0.006	0.004	-0.000
58	-0.095	-0.067	-0.068	-0.000	-0.174	0.027	0.036	0.050	0.056	0.111
59	0.053	0.120	0.144	-0.025	-0.110	-0.103	-0.034	0.121	-0.014	0.030
60	0.077	0.022	0.002	0.070	-0.015	0.029	-0.027	0.017	0.022	-0.000
61	-0.000	0.058	-0.017	-0.014	0.042	0.027	-0.100	0.174	0.124	0.207
62	-0.014	0.021	0.062	-0.070	0.050	0.083	0.045	-0.014	-0.057	0.010
63	0.022	-0.009	-0.071	0.104	0.014	0.027	-0.190	0.191	0.176	0.114
64	0.054	0.032	0.019	-0.105	0.041	0.013	0.007	-0.000	-0.033	-0.072
65	0.023	-0.047	-0.040	-0.000	0.003	-0.005	-0.054	0.054	0.052	0.000
66	0.075	0.029	0.080	-0.030	0.117	0.104	-0.019	0.028	-0.123	-0.121
67	0.012	-0.022	-0.001	0.030	0.257	0.123	-0.235	0.083	0.054	0.174
68	0.052	0.010	-0.040	-0.012	-0.110	-0.105	-0.105	-0.105	-0.079	-0.051
69	0.004	-0.000	0.007	0.101	0.111	0.116	-0.137	0.175	0.081	0.112
70	-0.004	-0.014	0.060	-0.000	0.095	0.201	-0.155	0.197	0.107	0.120
71	0.000	0.011	0.051	-0.086	-0.102	0.220	0.030	0.063	0.089	0.000
72	0.010	0.050	0.062	-0.000	-0.107	0.173	0.001	0.024	0.117	0.100
73	-0.005	-0.020	0.030	-0.000	-0.000	0.123	-0.035	0.101	0.053	0.011
74	-0.002	-0.010	-0.001	0.100	-0.030	-0.000	0.072	-0.000	-0.100	-0.070
75	0.010	-0.002	0.000	-0.000	0.011	-0.000	0.113	-0.000	-0.000	-0.000
76	-0.000	-0.010	-0.001	0.000	0.164	0.000	-0.000	-0.000	-0.000	0.075
77	-0.000	-0.000	-0.000	0.000	-0.000	-0.000	0.075	0.000	-0.000	-0.000

	27	28	29	30						
1	-0.003	0.021	-0.001	0.087	-0.000	0.000	-0.000	-0.000	-0.000	-0.120
2	0.005	-0.002	-0.127	0.104	0.001	0.103	-0.000	-0.000	-0.000	-0.113
3	-0.061	0.000	0.107	-0.000	0.000	0.103	0.000	0.000	0.000	0.004
4	0.126	-0.000	-0.002	0.000	-0.000	0.000	0.000	0.000	0.000	-0.060
5	-0.015	-0.000	0.200	-0.007	0.000	0.100	0.000	0.000	0.000	0.036
6	0.104	-0.000	0.100	0.000	-0.000	-0.000	-0.000	0.000	0.000	0.086
7	-0.061	0.037	0.000	0.000	0.000	-0.000	0.000	0.000	0.000	0.077
8	0.110	0.112	0.010	-0.103	-0.000	-0.000	-0.000	-0.000	0.000	0.080
9	0.051	0.010	0.030	-0.002	-0.000	0.000	0.000	0.000	0.000	0.135
10	0.124	0.200	0.140	-0.000	0.000	0.111	0.000	0.000	0.000	0.253
11	-0.000	0.177	0.000	-0.000	0.000	0.000	0.000	-0.000	0.000	0.132
12	0.000	0.000	0.161	-0.000	0.000	0.000	0.000	0.000	0.000	0.117
13	0.007	0.144	0.152	-0.000	-0.000	-0.000	0.000	0.000	0.000	0.152
14	0.002	-0.140	-0.137	-0.000	0.000	0.000	-0.000	0.000	-0.000	0.076
15	-0.200	-0.075	-0.170	-0.100	-0.100	-0.100	-0.100	-0.000	-0.000	-0.000

16	-0.253	0.013	-0.147	-0.007	-0.127	-0.126	-0.045	-0.012	0.051	0.009
17	0.326	0.000	0.000	0.127	0.000	0.112	-0.000	0.026	0.046	0.038
18	-0.244	0.001	-0.001	-0.100	-0.100	-0.105	-0.010	-0.000	0.002	0.000
19	-0.232	-0.010	-0.147	-0.115	-0.000	-0.000	-0.000	-0.000	0.013	-0.124
20	-0.100	0.121	0.000	0.013	-0.000	-0.000	-0.000	-0.000	0.021	-0.144
21	1.000	0.100	0.000	0.216	0.169	0.221	0.049	0.150	0.001	0.110
22	0.160	1.000	0.100	0.100	0.100	0.045	0.260	0.070	0.400	0.106
23	0.000	0.300	1.000	0.001	0.000	0.000	0.260	0.176	0.425	0.209
24	0.216	0.100	0.001	1.000	0.000	0.200	0.000	0.100	-0.000	0.000
25	0.100	0.000	0.000	0.200	1.000	0.000	-0.016	0.000	-0.000	0.000
26	0.221	0.045	0.000	0.200	0.000	1.000	-0.000	0.100	-0.000	0.000
27	0.040	0.260	0.000	0.000	-0.000	-0.000	1.000	0.150	0.466	0.192
28	0.150	0.070	0.176	0.100	0.000	0.105	0.150	1.000	0.241	0.000
29	0.001	0.400	0.425	-0.016	-0.000	-0.000	0.466	0.241	1.000	0.100
30	0.100	0.100	0.200	0.000	0.000	0.000	0.000	0.000	0.000	1.000
31	-0.000	0.100	0.200	-0.000	-0.000	-0.000	0.000	0.000	0.162	0.000
32	-0.100	0.100	-0.000	-0.000	-0.000	-0.000	0.138	-0.000	0.010	-0.000
33	-0.000	0.100	0.100	0.000	0.000	-0.000	0.113	-0.000	0.020	-0.000
34	0.170	0.001	-0.000	0.000	0.000	0.000	-0.000	-0.000	-0.000	-0.111
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-0.000	0.000	0.000
36	0.000	-0.000	-0.000	-0.000	-0.000	-0.000	0.000	-0.000	-0.000	-0.000
37	0.000	0.000	0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
38	-0.011	0.236	0.100	-0.000	-0.000	-0.000	0.110	0.000	0.156	0.070
39	0.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.110	0.000
40	-0.010	-0.100	0.000	-0.000	-0.000	-0.000	-0.000	0.000	0.000	0.000
41	-0.000	0.000	0.000	0.000	0.000	0.000	0.000	-0.000	0.129	-0.000
42	0.000	0.100	-0.000	0.146	-0.100	-0.000	0.000	-0.000	0.100	-0.000
43	-0.000	0.200	-0.000	0.000	0.000	-0.113	0.000	0.000	0.000	0.000
44	0.000	0.000	0.167	0.000	-0.000	-0.000	0.000	0.000	0.100	0.000
45	0.000	0.000	-0.000	0.000	-0.000	-0.000	0.143	-0.000	0.000	-0.000
46	-0.101	0.000	0.000	-0.100	-0.000	-0.000	0.000	-0.000	-0.000	-0.000
47	-0.100	-0.000	-0.000	0.000	0.000	0.100	-0.000	-0.000	-0.000	0.000
48	0.000	0.000	0.000	-0.000	-0.000	0.000	0.000	-0.000	-0.000	-0.000
49	-0.000	0.000	-0.000	0.000	-0.000	-0.000	0.000	-0.000	-0.000	-0.000
50	0.125	0.074	0.000	-0.011	0.100	0.142	0.000	0.101	0.010	0.101
51	-0.271	-0.000	-0.000	-0.000	-0.000	-0.000	0.000	0.000	0.012	-0.000
52	0.000	0.000	0.000	0.000	0.000	0.000	-0.000	0.118	0.000	0.000
53	-0.000	-0.000	0.000	0.000	-0.000	-0.000	-0.000	-0.000	0.000	-0.000
54	-0.000	-0.000	-0.000	-0.100	-0.000	0.000	-0.100	-0.245	-0.000	-0.100
55	-0.000	0.000	0.000	0.000	-0.000	-0.000	0.000	0.000	0.000	-0.000
56	-0.000	0.000	-0.000	-0.100	0.000	0.000	0.000	-0.000	-0.000	0.000
57	-0.000	0.000	-0.000	-0.000	-0.000	0.100	0.100	-0.000	-0.000	0.000
58	0.000	0.000	0.000	-0.000	0.000	0.000	-0.000	-0.000	-0.000	-0.000
59	-0.010	0.000	0.000	-0.000	-0.000	-0.000	0.000	0.127	0.017	0.000
60	0.000	0.000	-0.000	-0.000	-0.000	-0.000	-0.000	0.000	0.110	0.100
61	-0.000	0.100	-0.000	0.000	-0.000	-0.000	0.000	-0.000	0.000	-0.000
62	0.014	-0.100	-0.100	-0.000	-0.000	-0.000	-0.000	0.000	-0.000	-0.000
63	-0.000	0.000	-0.000	0.000	-0.000	-0.000	0.000	-0.119	-0.000	-0.100
64	0.000	-0.000	-0.100	-0.016	0.000	0.000	-0.137	-0.013	-0.000	-0.000
65	0.000	0.000	0.117	-0.000	-0.000	-0.000	0.000	0.000	0.100	0.000
66	0.100	-0.000	-0.000	0.100	0.000	0.000	-0.000	0.000	-0.000	0.000
67	-0.101	-0.100	-0.000	-0.000	-0.000	-0.000	-0.000	0.017	-0.000	0.000
68	0.100	0.000	-0.000	0.100	0.100	0.100	0.000	0.000	0.000	0.100
69	-0.000	0.000	0.100	-0.100	-0.100	-0.100	-0.000	0.000	0.100	0.100
70	-0.100	0.000	0.000	-0.000	-0.100	-0.100	0.000	0.000	0.100	0.100
71	0.000	0.100	0.000	0.000	0.000	0.000	-0.000	-0.000	0.100	0.000
72	0.000	0.100	0.000	0.000	0.000	0.000	0.000	0.000	0.100	0.000
73	0.000	0.100	0.000	0.000	0.000	0.000	-0.000	0.000	0.100	0.000
74	-0.000	-0.000	-0.000	0.100	-0.000	-0.000	0.000	0.000	0.000	0.100
75	0.000	0.000	-0.000	0.000	0.100	0.100	0.100	-0.000	-0.000	-0.000

8	-0.000	0.000	0.000	-0.000	-0.000	-0.100	0.000	-0.000	0.100	0.000
9	0.100	0.000	-0.000	0.000	0.000	0.000	-0.000	0.000	0.000	-0.000

	31	32	33	34	35	36	37	38	39	40
1	0.0	-0.040	-0.070	-0.090	-0.060	0.077	-0.007	-0.007	-0.007	0.065
2	-0.087	-0.024	0.077	0.101	-0.065	-0.021	-0.002	-0.002	0.002	-0.171
3	0.071	-0.022	-0.067	0.090	0.017	0.043	0.037	0.175	0.114	-0.130
4	0.075	-0.040	-0.026	-0.017	-0.024	0.042	-0.010	-0.002	-0.036	0.178
5	0.071	0.051	0.000	0.050	0.104	0.027	0.170	0.046	0.049	-0.163
6	0.241	-0.050	0.000	0.010	0.077	-0.142	0.051	-0.002	0.014	0.040
7	0.0	0.115	0.050	-0.037	-0.044	-0.023	0.047	0.139	-0.026	-0.055
8	-0.034	-0.053	-0.119	-0.154	0.045	0.009	0.005	-0.013	0.021	-0.039
9	-0.042	-0.001	-0.005	-0.055	-0.095	0.022	-0.007	-0.115	-0.042	0.108
10	0.121	0.021	0.036	0.040	0.026	0.103	0.113	0.046	0.078	-0.071
11	0.145	0.020	0.040	0.001	0.058	0.132	-0.011	0.100	0.029	-0.080
12	0.077	0.002	-0.027	0.020	-0.067	0.102	-0.004	-0.014	-0.046	-0.069
13	0.002	0.070	-0.050	0.122	0.015	0.021	-0.061	0.019	-0.030	-0.067
14	-0.154	-0.026	-0.047	-0.078	-0.112	0.023	-0.125	-0.140	0.032	0.152
15	0.054	0.090	-0.103	-0.114	0.012	-0.025	-0.056	0.006	-0.020	0.142
16	-0.032	0.152	0.064	0.051	0.022	-0.015	-0.050	-0.041	0.031	0.067
17	-0.115	-0.078	0.000	0.220	0.030	-0.021	-0.034	-0.032	0.106	-0.094
18	0.068	0.116	0.022	-0.072	0.047	0.039	0.017	0.045	0.024	0.190
19	-0.022	0.146	-0.140	0.076	0.080	-0.097	0.037	0.003	0.010	0.037
20	-0.060	0.124	0.134	0.165	-0.042	0.083	-0.042	-0.036	-0.016	0.070
21	-0.025	-0.109	0.073	0.172	0.000	0.025	0.061	-0.011	0.101	-0.018
22	0.101	0.132	0.125	0.051	0.020	-0.002	0.001	0.236	0.047	-0.003
23	0.221	-0.020	0.159	-0.009	0.010	-0.062	0.168	0.139	0.040	0.023
24	-0.040	-0.005	0.063	0.060	0.013	-0.023	0.077	-0.020	0.022	-0.008
25	-0.135	-0.026	-0.033	0.040	0.047	-0.003	0.175	-0.020	0.127	-0.042
26	-0.159	-0.067	-0.011	0.036	0.020	0.042	0.033	-0.041	0.025	-0.081
27	0.125	0.135	0.112	-0.071	0.020	-0.040	-0.007	0.110	0.034	-0.058
28	0.0	-0.020	-0.066	-0.045	-0.041	-0.022	-0.002	0.064	0.036	0.066
29	0.162	0.010	0.020	-0.002	0.071	-0.053	0.025	0.156	0.110	0.072
30	0.165	-0.025	-0.032	-0.111	0.061	0.033	0.109	0.070	0.123	0.053
31	1.000	0.152	0.077	-0.078	0.020	-0.036	0.138	0.105	-0.018	0.085
32	0.152	1.000	0.171	0.090	0.141	-0.004	0.036	0.103	-0.085	0.046
33	0.077	0.171	1.000	0.035	0.004	-0.002	-0.002	-0.024	0.000	0.011
34	-0.070	0.050	0.045	1.000	0.022	0.141	0.142	0.057	0.193	0.010
35	0.020	0.151	0.024	0.020	0.070	0.079	0.110	0.254	0.111	0.071
36	-0.044	-0.034	-0.082	0.141	0.070	1.000	0.093	0.160	0.082	0.032
37	0.120	0.030	-0.015	0.100	0.180	0.095	1.000	0.143	0.201	0.100
38	0.105	0.102	-0.020	0.030	0.254	0.110	0.145	1.000	0.105	0.000
39	-0.010	-0.005	0.006	0.110	0.111	0.000	0.000	0.103	1.000	0.000
40	0.005	0.046	0.011	0.020	0.021	0.020	0.107	-0.022	0.000	1.000
41	0.000	0.114	-0.005	-0.000	0.110	-0.007	0.064	0.000	0.020	0.000
42	0.122	0.012	0.004	-0.041	-0.029	0.101	0.063	0.065	0.004	-0.070
43	0.132	0.030	0.032	0.040	0.010	0.110	0.037	0.172	0.021	-0.000
44	0.040	-0.044	-0.000	0.010	-0.062	-0.100	0.000	-0.013	-0.000	0.000
45	0.113	0.180	0.070	0.000	-0.000	-0.000	-0.000	0.063	0.010	0.000
46	-0.057	0.106	0.055	-0.113	-0.117	-0.110	-0.104	-0.021	-0.013	-0.000
47	-0.024	0.005	-0.051	-0.000	-0.053	-0.015	0.015	0.000	0.024	-0.115
48	0.019	0.133	0.022	0.000	0.140	0.102	0.012	0.033	0.028	0.110
49	-0.123	0.034	-0.124	-0.040	-0.206	-0.123	0.120	-0.047	-0.120	0.002
50	0.130	0.058	0.030	0.006	0.262	0.025	-0.043	0.188	-0.071	-0.057
51	0.0	-0.020	-0.012	-0.001	0.017	-0.021	0.133	0.135	0.049	0.043
52	0.0	0.007	0.152	0.000	0.072	0.060	0.110	0.024	0.109	0.000
53	0.0	-0.083	0.002	0.113	0.017	0.036	0.054	-0.024	0.001	0.001
54	-0.030	0.020	-0.090	-0.072	-0.067	-0.125	0.092	-0.036	0.040	-0.000
55	0.120	0.152	0.034	0.004	0.044	-0.218	0.145	-0.038	-0.037	0.054
56	-0.042	0.045	-0.016	0.010	0.057	0.090	0.127	0.082	-0.050	0.058
57	0.019	0.175	0.114	0.045	0.126	0.126	0.111	0.105	0.139	0.028
58	0.051	0.062	0.015	0.101	-0.011	-0.095	0.070	0.019	0.039	0.114
59	0.113	0.094	0.154	-0.070	-0.114	-0.024	0.112	0.016	0.021	0.051
60	-0.047	-0.019	0.011	0.000	-0.013	0.022	0.034	0.029	0.096	0.141
61	0.023	0.175	0.155	0.130	-0.024	-0.015	0.145	0.009	0.024	-0.005
62	-0.004	0.007	-0.061	0.058	0.044	0.065	-0.058	0.023	-0.025	-0.062
63	0.000	0.104	0.077	-0.010	-0.095	-0.077	0.030	0.066	0.034	0.010
64	-0.000	0.130	0.035	-0.017	-0.000	0.016	-0.050	0.025	-0.109	0.072
65	0.041	-0.020	-0.042	0.010	-0.040	-0.074	0.037	0.071	-0.023	0.075
66	0.070	0.071	0.045	0.074	0.087	-0.102	-0.071	0.033	-0.061	0.115
67	0.0	0.104	-0.155	-0.010	-0.122	0.048	0.106	-0.029	0.031	0.106
68	0.0	-0.067	0.053	-0.000	-0.037	0.113	-0.015	-0.040	-0.068	-0.035
69	0.020	0.050	-0.020	-0.120	0.010	-0.120	0.044	0.056	0.031	0.083
70	0.060	-0.001	-0.100	-0.007	-0.007	-0.005	0.131	-0.000	-0.000	0.089
71	0.122	0.103	0.061	0.100	-0.001	-0.100	0.120	0.099	0.054	0.074
72	0.081	0.126	0.206	0.001	-0.000	-0.175	0.025	0.093	0.036	0.083
73	0.000	0.166	0.060	0.001	-0.000	-0.154	0.139	0.006	-0.000	0.120
74	-0.045	0.007	-0.000	-0.000	-0.040	0.000	-0.054	-0.000	-0.000	0.000
75	-0.000	0.000	-0.000	0.000	0.051	-0.000	0.000	-0.022	0.040	-0.100
76	0.000	0.001	-0.000	0.000	-0.040	-0.115	0.100	0.061	0.074	0.047
77	-0.047	-0.076	0.040	0.000	-0.040	0.000	0.000	-0.004	0.115	0.012

	41	42	43	44	45	46	47	48	49	50
1	0.216	0.100	0.021	-0.060	-0.026	0.003	-0.000	0.116	-0.005	-0.01
2	-0.134	0.025	0.061	-0.003	-0.001	0.104	0.157	0.034	-0.030	0.03
3	-0.073	-0.075	-0.152	-0.003	-0.000	-0.006	0.009	-0.032	-0.053	-0.00
4	-0.000	-0.043	0.032	-0.041	-0.025	0.015	0.028	0.038	-0.004	-0.04
5	-0.000	-0.111	-0.103	-0.010	0.000	0.000	0.000	0.024	0.002	-0.00
6	0.010	-0.010	-0.016	-0.059	-0.000	-0.010	-0.007	0.036	-0.106	0.08
7	-0.123	0.097	0.085	-0.100	0.008	0.007	-0.004	-0.126	0.050	-0.11
8	-0.081	-0.061	-0.015	0.007	-0.011	-0.014	-0.012	-0.061	-0.075	0.12
9	-0.045	-0.115	-0.024	0.156	0.007	0.159	0.051	-0.003	-0.071	0.00
10	-0.137	-0.127	0.072	0.000	0.028	0.012	-0.035	0.074	-0.156	0.00
11	-0.084	-0.047	0.167	0.091	0.050	0.026	-0.040	0.005	-0.170	0.06
12	-0.140	-0.124	-0.016	0.140	0.002	0.000	-0.041	0.029	-0.000	0.11
13	-0.120	-0.239	0.074	0.100	0.031	0.001	-0.072	0.053	-0.128	0.09
14	0.020	-0.056	-0.133	0.001	0.017	0.102	0.131	0.050	0.065	-0.00
15	-0.074	-0.001	0.061	-0.160	-0.017	0.201	-0.113	0.001	0.172	-0.00
16	0.084	-0.002	0.126	-0.002	0.004	0.029	-0.000	0.107	0.053	0.01
17	-0.070	-0.037	-0.023	-0.017	-0.005	-0.073	-0.046	-0.017	0.074	-0.00
18	0.087	-0.070	0.030	0.002	0.174	0.065	0.003	0.037	-0.069	0.02
19	0.153	-0.040	0.047	-0.000	0.073	0.153	-0.070	0.078	0.079	-0.04
20	0.040	-0.040	0.093	0.110	0.045	0.021	0.000	0.151	0.002	-0.04
21	-0.000	0.070	-0.055	0.037	0.000	-0.101	-0.108	0.044	-0.059	0.12
22	0.016	0.183	0.201	0.001	0.073	0.070	-0.050	0.073	0.000	0.07
23	0.001	-0.044	-0.000	0.157	-0.014	0.001	-0.052	0.009	-0.000	0.04
24	0.070	0.145	0.098	-0.000	0.055	-0.105	0.028	-0.127	0.004	-0.01
25	0.000	-0.070	-0.157	-0.000	-0.000	-0.114	0.036	0.044	-0.019	0.10
26	0.042	-0.066	-0.112	-0.000	-0.053	-0.063	0.102	0.102	-0.033	0.14
27	0.040	0.052	0.104	0.000	0.143	0.012	-0.000	0.045	0.012	0.02
28	-0.010	-0.040	-0.017	-0.000	-0.001	-0.077	-0.049	-0.065	-0.036	0.10
29	0.120	0.100	0.090	0.100	0.007	-0.016	-0.071	-0.042	-0.027	0.01
30	-0.010	-0.055	0.018	0.000	-0.031	-0.085	0.028	-0.007	-0.052	0.12
31	0.060	0.120	0.132	0.045	0.113	-0.057	-0.024	0.029	-0.123	0.13
32	0.114	0.012	0.030	-0.044	0.183	0.106	0.095	0.124	0.034	0.00
33	-0.045	0.006	0.030	-0.000	0.070	0.053	-0.051	0.033	-0.134	0.00
34	-0.000	-0.141	0.000	0.000	0.107	-0.113	-0.000	0.000	-0.000	0.00
35	0.140	-0.029	0.000	-0.032	-0.027	-0.117	-0.058	0.149	-0.000	0.00
36	-0.017	0.101	0.110	-0.132	-0.063	-0.110	-0.011	0.100	-0.128	0.00
37	0.064	0.063	0.007	0.073	-0.000	-0.104	0.015	0.012	0.000	-0.00
38	0.121	0.065	0.172	-0.013	0.063	-0.021	0.000	0.033	-0.000	0.00
39	0.000	0.000	0.021	-0.000	0.010	-0.010	0.024	0.000	-0.120	0.00
40	0.100	-0.070	-0.007	0.100	0.103	0.000	-0.115	0.118	0.002	0.00
41	1.000	0.000	0.034	-0.000	0.079	0.011	0.045	0.044	-0.022	0.00
42	0.000	1.000	0.520	-0.007	-0.040	0.035	0.007	-0.031	0.043	-0.00
43	0.064	0.520	1.000	0.063	0.110	-0.010	-0.049	0.105	-0.038	-0.00
44	-0.000	-0.007	0.060	1.000	0.276	0.032	0.072	0.042	-0.018	0.01
45	0.070	-0.040	0.110	0.075	1.000	0.128	0.013	0.131	0.044	0.10
46	0.011	0.035	-0.010	0.032	0.136	1.000	0.073	0.012	0.118	-0.10
47	0.045	0.007	-0.040	0.073	0.013	0.073	1.000	0.019	0.141	-0.04
48	0.044	-0.041	0.105	0.042	0.131	0.012	0.019	1.000	-0.021	0.07
49	-0.020	0.043	-0.028	-0.018	0.044	0.118	0.151	-0.021	1.000	-0.00
50	0.084	-0.077	-0.064	0.011	0.104	-0.102	-0.045	0.072	-0.353	1.00
51	-0.100	-0.028	-0.030	-0.015	0.084	0.103	0.070	0.049	0.140	0.12
52	-0.000	0.019	0.045	0.130	-0.114	-0.093	-0.051	0.017	-0.036	-0.00
53	0.122	0.000	0.017	-0.010	0.090	-0.109	0.012	-0.001	0.029	0.00
54	0.072	0.118	0.039	-0.046	-0.010	-0.046	0.071	-0.130	0.144	-0.00
55	0.130	-0.043	-0.030	0.001	0.130	0.054	0.034	-0.033	0.048	-0.00
56	0.160	-0.030	-0.045	-0.051	0.160	0.093	0.020	-0.024	0.002	-0.00
57	-0.000	0.000	-0.001	-0.064	-0.000	-0.027	-0.128	-0.032	0.044	-0.00
58	0.015	0.010	-0.001	0.007	0.010	-0.012	-0.050	-0.126	0.021	0.00
59	-0.007	-0.000	0.004	0.020	0.210	0.109	0.105	0.011	0.032	-0.10
60	-0.070	-0.042	0.024	0.151	-0.020	0.130	-0.015	0.006	0.109	-0.10
61	-0.020	-0.052	0.064	0.035	0.115	0.005	0.021	-0.078	0.017	-0.00
62	-0.120	-0.125	-0.126	-0.000	-0.000	0.009	-0.020	0.096	-0.034	0.00
63	-0.020	0.000	0.079	-0.000	0.075	0.105	-0.000	-0.171	0.099	-0.00
64	-0.077	0.100	0.033	-0.000	0.012	0.031	-0.002	0.046	-0.004	0.00
65	0.001	0.111	0.076	0.007	-0.000	-0.105	-0.078	-0.078	0.093	-0.00
66	0.103	0.022	0.113	-0.000	0.050	-0.072	-0.037	0.090	-0.086	0.20
67	0.136	0.016	-0.002	-0.038	0.042	-0.016	0.059	-0.018	-0.029	0.04
68	-0.120	0.013	-0.002	-0.000	-0.057	-0.044	0.004	0.146	0.055	0.01
69	0.020	-0.000	0.049	0.132	-0.040	0.100	-0.003	-0.052	0.091	-0.00
70	-0.040	-0.000	0.013	0.093	0.122	0.154	0.015	0.063	0.126	-0.10
71	0.000	-0.100	0.000	0.126	0.240	0.103	0.028	0.002	0.014	-0.00
72	0.140	-0.000	0.000	0.040	0.225	0.030	-0.001	-0.045	-0.126	-0.00
73	0.126	0.110	0.001	0.000	0.230	0.007	-0.010	-0.054	-0.000	-0.00
74	0.040	0.100	0.033	-0.000	-0.060	0.004	-0.012	0.099	0.013	-0.00
75	-0.000	0.100	0.000	-0.000	-0.000	-0.000	0.071	0.176	-0.000	0.10
76	0.100	0.000	0.000	0.010	0.000	0.161	0.110	-0.037	0.094	-0.00
77	-0.100	-0.000	0.010	0.000	-0.100	-0.100	0.058	0.055	-0.000	-0.00

1	-0.262	-0.050	0.012	-0.142	0.077	0.177	-0.110	0.001	-0.044	0.096
2	0.001	-0.057	-0.063	-0.113	-0.017	-0.077	-0.034	-0.143	-0.056	-0.058
3	-0.016	0.025	0.070	0.007	0.045	-0.010	0.041	-0.048	-0.077	-0.009
4	-0.115	0.047	-0.055	0.007	-0.107	-0.066	-0.047	0.067	-0.073	0.049
5	-0.022	-0.000	-0.085	-0.091	0.100	-0.001	-0.007	-0.131	0.063	-0.148
6	-0.026	-0.075	0.011	-0.074	0.011	0.040	-0.001	0.096	0.000	0.000
7	0.023	0.048	0.015	-0.001	0.045	0.001	0.018	-0.066	0.096	0.031
8	-0.037	-0.110	-0.021	0.000	-0.006	-0.150	-0.012	-0.075	-0.002	0.024
9	0.012	0.028	-0.002	0.004	0.031	0.001	-0.038	-0.019	0.108	0.106

10	-0.094	-0.028	-0.137	-0.146	0.055	0.142	0.077	-0.080	0.143	0.062
11	-0.056	0.025	-0.053	-0.055	0.011	0.123	0.045	-0.025	0.053	0.077
12	-0.090	-0.061	0.038	-0.130	0.057	0.033	0.037	-0.067	0.120	0.092
13	-0.053	-0.051	-0.078	-0.105	0.001	0.121	-0.004	-0.063	0.144	0.092
14	-0.194	-0.163	-0.105	0.021	-0.015	0.137	-0.123	-0.080	-0.029	0.079
15	0.215	-0.042	-0.102	0.037	-0.000	-0.019	0.001	-0.174	-0.110	-0.015
16	0.114	0.079	0.091	-0.025	0.064	-0.064	0.002	0.027	-0.103	0.028
17	-0.161	0.036	0.020	0.110	-0.166	-0.072	-0.035	0.036	-0.034	-0.027
18	0.065	0.049	0.068	-0.009	0.067	-0.004	0.009	0.050	0.121	0.017
19	-0.153	-0.009	0.103	-0.003	0.062	-0.002	0.004	0.056	-0.014	0.022
20	-0.010	0.000	0.135	-0.134	0.141	-0.025	-0.002	0.111	0.020	-0.049
21	-0.271	0.070	-0.074	-0.038	-0.000	-0.045	-0.029	0.000	-0.010	0.007
22	-0.060	0.035	-0.081	-0.011	0.070	-0.027	0.035	0.064	0.072	0.026
23	-0.004	0.044	-0.066	-0.046	0.026	-0.104	-0.011	0.024	0.032	-0.052
24	-0.009	0.036	0.090	-0.105	0.031	-0.050	-0.036	-0.039	-0.002	-0.061
25	-0.001	0.113	-0.055	-0.000	-0.006	0.042	0.153	0.001	0.045	-0.160
26	-0.064	0.072	-0.000	0.005	-0.000	0.033	0.102	0.012	-0.000	-0.190
27	0.037	-0.070	-0.006	-0.105	-0.000	0.075	0.159	-0.002	0.049	-0.064
28	0.025	0.119	-0.004	-0.145	0.001	-0.012	-0.022	-0.047	0.127	0.042
29	0.012	0.070	0.027	-0.074	0.073	-0.006	0.048	0.183	0.017	0.110
30	-0.069	0.008	-0.031	-0.130	-0.024	-0.003	0.078	-0.006	0.166	0.169
31	0.000	0.000	0.000	-0.030	0.120	-0.004	0.010	0.061	0.113	-0.037
32	-0.032	-0.007	-0.033	0.026	0.103	0.005	0.175	0.062	0.094	-0.019
33	-0.013	0.152	0.002	-0.005	0.000	-0.011	0.114	0.015	0.154	0.011
34	-0.001	0.000	0.113	-0.072	0.004	0.000	0.000	0.101	-0.020	0.056
35	0.017	0.072	0.017	-0.067	0.044	0.057	0.116	-0.011	-0.114	-0.013
36	-0.251	0.000	0.000	-0.125	-0.010	0.000	0.126	-0.098	-0.000	0.022
37	0.103	0.110	0.000	0.002	0.146	0.127	0.211	0.070	0.112	0.034
38	0.125	0.004	-0.004	-0.006	-0.004	-0.004	0.199	0.019	0.016	0.029
39	0.049	-0.100	0.001	0.000	-0.007	-0.058	0.139	0.039	0.021	0.056
40	0.043	0.000	0.001	-0.190	0.004	0.053	0.028	0.174	0.051	0.141
41	-0.100	-0.000	0.122	0.072	0.130	0.167	-0.000	0.018	-0.087	-0.070
42	-0.026	0.019	0.008	0.118	-0.004	-0.039	0.029	0.016	-0.039	-0.042
43	-0.033	0.045	0.017	0.009	-0.000	-0.045	-0.001	-0.081	0.004	0.026
44	-0.015	0.123	-0.009	-0.046	0.001	-0.051	-0.004	0.007	0.020	0.151
45	0.054	-0.114	0.000	-0.010	0.130	0.160	-0.020	0.010	0.218	-0.020
46	0.106	-0.000	-0.100	-0.004	0.054	0.093	-0.027	-0.012	0.108	0.130
47	0.070	-0.051	0.012	0.071	0.034	0.070	-0.135	-0.000	0.105	-0.018
48	0.049	0.017	-0.071	-0.130	-0.033	-0.024	-0.032	-0.126	0.011	0.006
49	0.149	-0.000	0.000	0.144	0.040	0.002	0.044	0.021	0.032	0.109
50	0.127	-0.000	0.005	-0.000	-0.120	-0.126	-0.009	0.009	-0.105	-0.144
51	1.000	-0.013	0.071	0.106	-0.020	-0.175	0.057	0.093	-0.011	-0.150
52	-0.013	1.000	0.037	-0.128	-0.145	-0.077	0.043	-0.019	0.054	0.025
53	0.071	0.037	1.000	-0.026	0.040	-0.111	-0.146	-0.041	-0.145	-0.072
54	0.106	-0.130	-0.028	1.000	0.060	-0.162	0.028	-0.021	-0.157	-0.084
55	-0.020	-0.145	0.050	0.040	1.000	0.100	0.044	-0.015	0.125	-0.052
56	-0.176	-0.077	-0.111	-0.162	0.102	1.000	0.154	0.089	0.161	-0.015
57	0.057	0.042	-0.146	0.020	0.044	0.154	1.000	0.156	0.197	0.119
58	0.093	-0.019	-0.041	-0.021	-0.015	0.089	0.156	1.000	0.092	0.099
59	-0.011	0.054	-0.145	-0.157	0.125	0.161	0.107	0.082	1.000	0.213
60	-0.150	0.079	-0.072	-0.004	-0.052	-0.015	0.112	0.020	0.213	1.000
61	-0.023	0.012	0.023	-0.066	0.002	0.084	0.217	0.156	0.269	0.095
62	-0.062	-0.001	-0.114	-0.100	-0.075	0.002	-0.109	-0.139	-0.132	-0.040
63	-0.010	0.007	0.003	0.004	0.120	0.028	0.161	0.164	0.191	0.053
64	-0.110	0.087	-0.039	-0.237	-0.087	0.104	0.070	0.010	0.018	0.046
65	0.001	-0.000	0.120	0.006	0.101	-0.029	0.075	0.115	-0.101	-0.000
66	-0.047	-0.040	0.006	-0.056	-0.007	0.029	0.000	-0.033	0.026	0.067
67	-0.004	-0.001	0.071	-0.071	-0.049	0.195	0.004	0.000	0.109	-0.190
68	0.024	-0.025	-0.062	-0.100	-0.107	-0.071	0.041	0.026	0.020	0.062
69	0.103	0.040	0.017	0.074	0.150	0.040	-0.027	0.058	0.073	0.068

0	0.170	0.033	0.004	-0.100	0.078	0.113	0.024	0.099	0.193	0.137
1	0.000	0.110	-0.000	-0.116	0.114	0.000	0.104	0.159	0.214	0.095
2	-0.117	0.047	-0.000	-0.000	0.110	0.000	0.000	0.107	0.306	0.063
3	-0.000	-0.000	-0.000	0.000	0.000	0.000	0.013	0.112	0.473	0.000
4	-0.110	-0.100	-0.000	-0.100	0.000	0.000	-0.000	0.000	-0.039	-0.001
5	-0.000	-0.000	-0.000	-0.000	-0.000	0.000	0.000	0.000	-0.143	-0.070
6	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	0.000	0.100	0.100
7	0.000	0.000	-0.000	-0.000	-0.000	0.000	0.000	-0.000	0.000	0.000

	61	62	63	64	65	66	67	68	69	70
1	-0.000	0.000	-0.001	0.000	0.000	0.001	-0.001	-0.001	-0.000	-0.000
2	-0.004	0.000	-0.001	0.000	0.000	0.001	-0.001	-0.001	-0.000	-0.000
3	-0.007	-0.001	-0.001	-0.001	-0.001	0.000	-0.001	-0.001	-0.001	-0.001
4	-0.009	0.000	0.000	-0.001	-0.001	0.000	-0.001	-0.001	-0.001	-0.001
5	0.011	-0.007	-0.001	-0.001	0.000	0.000	-0.001	-0.001	0.000	0.000
6	-0.009	0.000	0.000	0.000	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
7	0.006	-0.001	-0.001	0.000	0.000	0.000	-0.001	-0.001	-0.001	-0.001
8	-0.012	0.000	-0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9	-0.015	-0.001	-0.001	0.000	0.000	0.000	-0.001	-0.001	0.000	-0.001
10	-0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
11	-0.000	-0.001	0.000	0.000	0.000	0.000	-0.001	-0.001	-0.001	-0.001
12	0.009	0.000	-0.001	0.000	-0.001	-0.001	-0.001	-0.001	0.000	0.000
13	-0.017	0.000	-0.001	0.000	0.000	0.000	-0.001	-0.001	0.000	0.000
14	-0.004	-0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17	-0.000	0.000	-0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18	0.014	-0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19	0.014	-0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
21	-0.007	0.000	-0.001	0.000	0.000	0.000	-0.001	-0.001	0.000	0.000
22	0.015	-0.001	0.000	0.000	0.000	0.000	-0.001	-0.001	0.000	0.000
23	-0.002	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
24	0.003	-0.001	0.000	-0.001	0.000	0.000	-0.001	-0.001	0.000	0.000
25	-0.009	-0.001	-0.001	0.000	0.000	0.000	-0.001	-0.001	0.000	0.000
26	-0.006	-0.000	-0.001	0.000	0.000	0.000	-0.001	-0.001	0.000	0.000
27	0.003	-0.001	0.000	0.000	0.000	0.000	-0.001	-0.001	0.000	0.000
28	-0.009	0.000	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	0.000	0.000
29	0.009	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	0.000	0.000
30	-0.007	-0.001	0.000	-0.001	-0.001	-0.001	0.000	0.000	0.000	0.000
31	0.003	-0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.015	0.000	0.000	0.000	0.000	0.000	-0.001	-0.001	0.000	0.000
33	0.015	-0.001	0.000	0.000	0.000	0.000	-0.001	-0.001	0.000	0.000
34	0.013	0.000	-0.001	-0.001	-0.001	-0.001	0.000	0.000	0.000	0.000
35	-0.004	0.000	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
36	-0.015	0.000	-0.001	0.000	0.000	0.000	-0.001	-0.001	0.000	0.000
37	0.015	-0.001	0.000	0.000	0.000	0.000	-0.001	-0.001	0.000	0.000
38	0.009	-0.001	0.000	0.000	0.000	0.000	-0.001	-0.001	0.000	0.000
39	0.004	-0.001	0.000	0.000	0.000	0.000	-0.001	-0.001	0.000	0.000
40	-0.006	-0.001	0.000	0.000	0.000	0.000	-0.001	-0.001	0.000	0.000
41	-0.002	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
42	-0.002	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
43	0.004	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
44	0.004	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
45	0.015	-0.001	0.000	0.000	0.000	0.000	-0.001	-0.001	0.000	0.000
46	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
47	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001

48	-0.009	0.000	-0.001	0.000	-0.001	0.000	-0.001	0.000	-0.001	0.000
49	0.017	-0.001	0.000	-0.001	0.000	-0.001	0.000	-0.001	0.000	-0.001
50	-0.002	0.000	-0.001	0.000	-0.001	0.000	-0.001	0.000	-0.001	0.000
51	-0.003	-0.001	-0.001	0.000	0.000	-0.001	-0.001	-0.001	-0.001	-0.001
52	0.013	-0.001	0.000	0.000	0.000	0.000	-0.001	-0.001	0.000	0.000
53	0.003	-0.001	0.000	0.000	0.000	0.000	-0.001	-0.001	0.000	0.000
54	-0.009	-0.001	0.000	0.000	0.000	0.000	-0.001	-0.001	0.000	0.000
55	0.002	-0.001	0.000	0.000	0.000	0.000	-0.001	-0.001	0.000	0.000
56	0.003	-0.001	0.000	0.000	0.000	0.000	-0.001	-0.001	0.000	0.000
57	0.017	-0.001	0.000	0.000	0.000	0.000	-0.001	-0.001	0.000	0.000
58	0.015	-0.001	0.000	0.000	0.000	0.000	-0.001	-0.001	0.000	0.000
59	0.009	-0.001	0.000	0.000	0.000	0.000	-0.001	-0.001	0.000	0.000
60	0.009	-0.001	0.000	0.000	0.000	0.000	-0.001	-0.001	0.000	0.000
61	0.000	-0.001	0.000	0.000	0.000	0.000	-0.001	-0.001	0.000	0.000
62	-0.004	0.000	-0.001	0.000	0.000	0.000	-0.001	-0.001	0.000	0.000
63	0.003	-0.001	0.000	0.000	0.000	0.000	-0.001	-0.001	0.000	0.000
64	-0.002	-0.001	0.000	0.000	0.000	0.000	-0.001	-0.001	0.000	0.000
65	0.004	-0.001	0.000	0.000	0.000	0.000	-0.001	-0.001	0.000	0.000
66	-0.009	0.000	-0.001	0.000	0.000	0.000	-0.001	-0.001	0.000	0.000
67	0.003	0.000	-0.001	0.000	0.000	0.000	-0.001	-0.001	0.000	0.000
68	0.002	-0.001	0.000	0.000	0.000	0.000	-0.001	-0.001	0.000	0.000
69	0.009	-0.001	0.000	0.000	0.000	0.000	-0.001	-0.001	0.000	0.000
70	0.009	0.000	0.000	0.000	0.000	0.000	-0.001	-0.001	0.000	0.000
71	0.009	-0.001	0.000	0.000	0.000	0.000	-0.001	-0.001	0.000	0.000
72	0.007	-0.001	0.000	0.000	0.000	0.000	-0.001	-0.001	0.000	0.000
73	0.003	-0.001	0.000	0.000	0.000	0.000	-0.001	-0.001	0.000	0.000
74	-0.007	0.000	-0.001	0.000	0.000	0.000	-0.001	-0.001	0.000	0.000
75	-0.001	0.000	-0.001	0.000	0.000	0.000	-0.001	-0.001	0.000	0.000
76	0.007	-0.001	0.000	0.000	0.000	0.000	-0.001	-0.001	0.000	0.000
77	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001

1	0.030	-0.044	-0.002	0.104	0.07	0.014	-0.11
2	0.008	-0.074	-0.11	-0.071	-0.117	0.023	0.238
3	0.041	0.005	-0.000	0.000	0.000	-0.004	0.014
4	0.078	-0.013	0.000	-0.001	-0.000	0.111	-0.054
5	-0.010	0.140	-0.000	-0.000	-0.000	0.020	-0.040
6	0.044	-0.080	-0.007	0.012	-0.100	-0.082	-0.001
7	-0.061	0.100	0.000	0.021	0.047	-0.014	-0.000
8	-0.025	-0.067	-0.044	-0.012	0.082	-0.008	-0.004
9	0.062	0.010	-0.049	-0.010	0.014	-0.000	0.117
10	0.040	0.106	0.024	-0.070	-0.006	-0.102	0.006
11	0.000	0.030	-0.045	-0.000	0.010	-0.020	-0.075
12	0.011	0.050	-0.070	-0.018	-0.000	-0.014	-0.045
13	0.051	0.052	0.000	-0.061	0.027	0.021	-0.067
14	-0.053	-0.000	-0.027	0.105	-0.044	0.094	0.028
15	-0.102	-0.107	-0.044	-0.006	0.011	0.164	-0.217
16	0.220	0.173	-0.120	-0.000	-0.039	0.065	-0.141
17	0.080	0.041	-0.025	0.072	0.113	-0.097	0.076
18	0.052	0.024	0.101	-0.056	-0.082	-0.020	0.045
19	0.099	0.117	0.053	-0.151	-0.082	-0.010	-0.059
20	0.030	0.107	0.011	-0.079	-0.068	0.075	-0.052
21	0.012	0.027	0.000	-0.012	0.014	-0.064	0.177
22	0.100	0.100	0.154	-0.002	0.085	0.082	0.032
23	0.008	0.081	0.085	-0.005	-0.004	0.083	-0.006
24	0.033	0.087	0.029	-0.162	0.054	-0.054	0.001
25	0.024	0.130	0.040	-0.031	0.153	-0.133	0.246

26	-0.036	0.054	-0.057	-0.015	0.141	-0.182	0.208
27	0.127	0.077	0.088	0.053	0.120	0.095	0.059
28	-0.009	0.027	-0.042	0.080	-0.033	-0.011	-0.033
29	0.132	0.162	0.262	0.248	-0.026	0.159	0.028
30	0.094	0.077	0.024	0.107	-0.046	0.010	-0.057
31	0.123	0.081	0.205	-0.045	-0.020	0.079	-0.147
32	0.100	0.126	0.166	0.007	0.004	0.091	-0.076
33	0.061	0.206	0.042	-0.020	-0.032	-0.065	0.048
34	0.154	0.091	0.001	-0.005	0.082	0.004	0.096
35	-0.001	-0.020	-0.020	-0.042	0.051	-0.046	-0.024
36	-0.162	-0.174	-0.154	0.024	-0.005	-0.115	0.095
37	0.125	0.025	0.130	-0.044	0.067	0.176	0.046
38	0.099	0.098	0.000	-0.000	-0.022	0.061	-0.004
39	0.054	0.036	-0.002	-0.004	0.049	0.074	0.115
40	0.074	0.083	0.120	0.104	-0.130	0.047	0.012
41	0.035	0.142	0.130	0.044	-0.096	0.164	-0.107
42	-0.144	-0.002	0.110	0.120	0.110	0.033	-0.071
43	0.002	0.086	0.081	0.023	0.049	0.000	0.012
44	0.126	0.042	0.098	-0.002	-0.060	0.013	0.030
45	0.230	0.225	0.230	-0.000	-0.058	0.092	-0.101
46	0.183	0.030	0.067	0.004	-0.029	0.161	-0.160
47	0.038	-0.001	-0.010	-0.012	0.071	0.110	0.056
48	0.002	-0.045	-0.064	0.036	0.176	-0.037	0.055
49	0.014	-0.126	-0.034	0.093	-0.030	0.094	-0.005
50	-0.000	-0.060	-0.030	-0.043	0.108	-0.072	-0.054
51	0.084	-0.117	-0.012	-0.113	-0.043	-0.018	0.017
52	0.110	0.047	-0.000	-0.176	-0.051	-0.042	0.057
53	-0.002	-0.080	-0.044	-0.031	-0.000	-0.060	-0.056
54	-0.116	-0.079	0.038	-0.142	-0.004	0.070	-0.026
55	0.113	0.113	0.204	0.027	-0.020	0.207	-0.088
56	0.059	0.098	0.044	0.135	0.093	-0.003	0.014
57	0.124	0.205	0.212	-0.045	0.006	-0.025	0.062
58	0.159	0.107	0.112	0.050	0.015	0.053	-0.030
59	0.214	0.286	0.273	-0.020	-0.143	0.109	0.052
60	0.025	0.062	0.065	-0.001	-0.078	0.100	0.044
61	0.257	0.277	0.203	-0.147	-0.111	0.272	-0.021
62	-0.088	-0.150	-0.170	0.017	0.175	-0.172	-0.040
63	0.144	0.213	0.120	-0.178	-0.170	0.043	0.020
64	-0.045	0.031	-0.069	0.176	0.323	-0.066	0.058
65	0.006	0.005	-0.040	0.254	-0.050	0.063	-0.037
66	-0.044	0.042	0.078	0.044	0.108	-0.042	0.002
67	-0.023	0.102	0.108	0.074	-0.011	0.094	-0.151
68	-0.000	-0.036	-0.056	0.112	0.032	-0.249	0.255
69	0.249	0.020	0.132	-0.001	-0.170	0.209	-0.135
70	0.261	0.015	0.122	-0.016	-0.077	0.171	-0.155
71	1.000	0.282	0.372	-0.001	-0.217	0.269	-0.073
72	0.382	1.000	0.800	-0.154	-0.125	0.026	-0.040
73	0.372	0.605	1.000	-0.020	-0.165	0.172	-0.070
74	-0.001	-0.154	-0.070	1.000	0.200	0.016	0.024
75	-0.217	-0.120	-0.165	0.200	1.000	-0.210	0.120
76	0.260	0.020	0.170	0.016	-0.210	1.000	-0.282
77	-0.078	-0.040	-0.070	0.024	0.120	-0.382	1.000

CORRELATIONS

	1	2	3	4	5	6	7	8	9	10
1	1.000	-0.147	-0.234	0.113	0.117	0.117	0.163	-0.142	0.191	-0.076
2	-0.147	1.000	0.117	-0.112	-0.117	-0.096	0.033	0.155	0.053	0.139
3	-0.234	0.117	1.000	-0.573	-0.104	-0.095	-0.071	0.021	-0.064	0.136
4	0.113	-0.112	-0.573	1.000	0.024	0.113	-0.021	-0.051	0.016	-0.075
5	0.117	0.149	-0.104	0.024	1.000	-0.142	0.021	-0.257	0.203	-0.101
6	0.096	-0.096	-0.095	0.093	-0.142	1.000	-0.150	0.211	-0.134	-0.043
7	0.163	0.033	-0.071	-0.021	0.021	-0.150	1.000	-0.245	0.193	-0.122
8	-0.242	0.155	0.021	-0.051	-0.257	0.211	-0.245	1.000	-0.059	0.233
9	0.053	0.055	-0.064	0.016	0.203	-0.034	0.193	-0.059	1.000	-0.253
10	-0.076	0.139	0.136	-0.075	-0.139	-0.134	-0.122	0.233	-0.253	1.000
11	0.397	-0.139	-0.149	0.062	0.090	0.054	0.037	-0.070	0.152	-0.273
12	0.256	-0.147	-0.189	0.090	-0.040	0.080	-0.039	0.072	0.086	-0.112
13	0.245	-0.157	-0.165	0.159	0.041	0.003	0.086	0.011	0.023	-0.164
14	0.192	-0.103	-0.171	0.160	0.023	0.026	0.073	0.043	0.017	-0.010
15	0.256	-0.170	-0.234	0.149	0.002	0.005	0.076	0.023	0.267	-0.102
16	0.322	-0.205	-0.209	0.152	0.003	0.036	0.079	0.030	0.267	-0.163
17	-0.055	0.070	0.002	0.002	-0.122	0.083	-0.138	0.053	-0.114	0.139
18	0.010	-0.227	-0.066	0.025	-0.113	0.092	-0.034	-0.093	-0.032	0.050
19	0.031	-0.137	-0.043	0.194	0.051	0.073	-0.011	0.074	0.042	0.000
20	0.191	-0.162	-0.195	0.065	0.021	0.032	0.021	0.011	0.110	-0.172
21	0.131	0.041	-0.007	0.051	-0.002	-0.004	-0.032	-0.006	0.052	-0.055
22	0.093	0.031	-0.016	0.106	0.024	0.037	0.043	0.013	0.033	-0.027
23	0.133	0.041	-0.023	0.093	0.112	0.007	0.140	-0.008	0.035	-0.132
24	0.154	-0.082	-0.150	0.131	0.011	0.089	0.030	0.040	-0.006	-0.036
25	-0.187	0.082	0.000	-0.077	0.092	-0.017	-0.052	0.034	-0.002	0.108
26	-0.041	0.095	0.009	-0.018	0.116	0.082	0.171	0.198	0.120	0.023
27	0.026	0.029	-0.049	0.011	0.050	-0.130	0.021	0.045	-0.007	-0.008
28	-0.111	0.071	0.014	0.016	0.041	-0.002	0.067	0.051	-0.037	0.082
29	-0.163	0.144	-0.061	0.027	0.028	0.007	0.039	0.046	-0.075	0.146
30	-0.342	0.120	0.059	-0.012	-0.040	0.073	0.037	0.255	-0.039	0.236
31	-0.285	0.063	0.100	-0.026	-0.107	0.036	-0.016	0.152	-0.002	0.252
32	-0.412	0.009	0.120	-0.075	-0.025	0.040	-0.004	0.150	-0.132	0.329
33	-0.195	0.030	0.046	-0.012	-0.023	0.023	0.007	0.120	0.007	0.149
34	-0.237	0.034	0.137	-0.043	-0.024	0.022	0.043	0.253	-0.074	0.193
35	-0.185	0.046	0.078	-0.069	-0.031	0.015	0.005	0.062	-0.009	0.157
36	-0.225	0.028	0.139	-0.114	-0.066	0.074	0.022	0.248	0.001	0.181
37	-0.159	0.156	0.137	-0.061	0.061	0.071	0.041	0.137	-0.073	0.168
38	-0.096	0.057	0.086	-0.128	0.055	0.021	0.022	0.093	-0.042	0.110
39	-0.057	0.156	0.094	-0.053	0.032	0.050	0.025	-0.045	-0.036	0.113
40	-0.092	0.104	0.041	-0.043	0.105	-0.012	0.073	0.121	0.012	0.041
41	-0.266	0.179	0.218	-0.134	0.077	-0.010	0.019	0.023	-0.003	0.205
42	-0.127	0.147	0.172	-0.112	0.076	0.049	0.045	0.098	-0.019	0.120
43	-0.056	-0.055	0.095	-0.112	-0.080	0.064	-0.037	0.095	-0.036	0.114
44	-0.022	-0.036	0.130	-0.101	-0.055	-0.002	-0.039	0.006	-0.119	0.047
45	0.266	0.020	-0.076	0.046	-0.005	0.030	-0.023	-0.020	0.172	-0.134
46	0.301	0.013	0.015	0.043	0.031	0.051	0.012	-0.012	0.205	-0.156
47	0.165	-0.086	-0.041	0.004	0.031	0.028	0.067	-0.013	0.012	-0.082
48	0.142	-0.117	-0.014	0.047	0.027	0.006	0.040	-0.082	0.093	-0.104
49	-0.015	-0.046	-0.034	0.083	-0.070	0.113	-0.039	0.092	-0.031	0.058
50	0.213	0.019	-0.105	0.134	0.054	0.050	0.118	0.014	0.068	-0.139
51	0.112	0.042	-0.039	0.032	0.015	0.096	0.019	0.017	-0.008	-0.074
52	-0.017	-0.141	-0.090	0.025	-0.065	0.037	-0.024	-0.108	-0.045	-0.033
53	0.256	-0.145	-0.105	0.141	-0.027	0.026	0.016	-0.006	0.099	-0.271
54	-0.053	0.034	0.003	0.020	0.017	0.072	0.079	0.014	-0.007	0.023
55	0.106	-0.119	-0.122	0.010	0.030	0.043	-0.005	-0.026	0.001	-0.097
56	0.059	-0.057	-0.065	0.070	0.015	0.000	0.030	0.078	0.012	-0.057
57	-0.026	-0.117	-0.037	-0.003	-0.014	0.093	-0.031	0.003	-0.044	0.038
58	-0.040	-0.092	0.043	-0.033	0.037	0.001	0.076	0.133	-0.005	0.021
59	-0.009	0.038	0.070	-0.049	0.023	-0.026	-0.011	0.031	-0.001	0.065
60	0.064	0.132	-0.043	0.053	0.014	-0.045	0.040	-0.035	0.054	0.071
61	-0.178	0.244	0.181	-0.209	-0.054	0.109	-0.104	0.179	-0.061	0.193
62	0.037	0.013	-0.023	0.025	-0.057	0.019	0.023	-0.007	0.073	0.042
63	0.140	0.040	-0.015	-0.021	-0.005	0.002	-0.050	0.0	0.072	0.027
64	0.134	-0.060	-0.004	-0.040	0.034	0.021	-0.019	-0.030	0.083	-0.037
65	-0.028	0.060	-0.002	0.183	-0.003	-0.021	-0.015	0.079	0.020	0.213
66	0.128	-0.031	0.001	0.057	-0.028	0.079	-0.008	-0.037	0.139	-0.140
67	-0.032	0.062	-0.043	0.022	-0.010	0.014	-0.025	0.087	0.054	0.077
68	0.025	0.007	0.087	-0.042	0.002	-0.042	0.029	-0.029	-0.037	-0.007
69	0.164	-0.070	-0.072	0.046	0.027	-0.028	-0.024	0.052	0.079	-0.074
70	-0.070	-0.013	0.062	-0.077	-0.021	0.034	0.028	0.086	0.014	0.076
71	0.003	0.042	-0.032	0.065	-0.007	-0.027	0.016	-0.031	-0.011	-0.061
72	0.173	-0.112	-0.093	0.024	-0.015	0.065	-0.063	0.030	0.020	-0.066
73	0.070	-0.020	-0.049	0.091	0.050	-0.037	-0.008	0.010	0.045	0.010
74	0.143	-0.016	-0.024	0.003	0.070	0.046	0.026	0.024	0.039	-0.111
75	0.030	-0.045	-0.072	0.056	0.068	0.005	0.078	0.013	0.035	0.039
76	0.065	-0.073	-0.048	-0.077	-0.003	0.053	0.034	0.037	0.040	0.022
77	0.001	0.119	0.061	-0.038	0.019	-0.003	-0.014	-0.056	0.035	0.011
78	-0.112	0.188	0.059	-0.013	0.017	0.021	0.041	0.010	0.031	0.077
79	0.051	-0.038	-0.031	0.027	-0.029	0.130	0.042	-0.014	0.023	-0.063
80	0.152	-0.100	-0.032	0.197	-0.034	-0.057	-0.046	-0.076	-0.019	-0.066

	11	12	13	14	15	16	17	18	19	20
1	0.357	-0.167	-0.157	0.192	0.256	0.152	-0.085	0.010	0.041	0.011
2	-0.169	-0.167	-0.157	-0.103	0.178	0.135	0.070	-0.027	-0.137	-0.011
3	-0.140	-0.139	-0.165	-0.161	0.139	-0.205	0.002	-0.056	-0.043	-0.011
4	0.062	0.090	0.159	0.169	0.149	0.162	0.062	0.025	0.104	0.011
5	0.080	-0.040	0.041	0.023	0.032	0.004	-0.122	-0.018	0.051	0.011
6	0.054	0.040	0.003	0.025	0.005	0.135	0.083	0.026	0.073	0.011
7	0.037	-0.038	0.086	-0.073	0.076	0.079	-0.138	-0.034	-0.011	0.011
8	-0.070	0.072	0.011	0.043	0.023	0.030	0.058	-0.083	0.024	0.011
9	0.152	0.056	0.328	0.017	0.067	0.067	-0.114	-0.032	0.042	0.011
10	-0.278	-0.112	-0.164	-0.010	-0.102	-0.183	0.180	0.050	0.000	-0.011
11	1.000	0.202	0.135	0.087	0.213	0.722	-0.027	-0.008	-0.040	0.011
12	0.202	1.000	0.408	0.158	0.418	0.405	0.172	0.043	0.010	0.011
13	0.125	0.408	1.000	0.718	0.660	0.691	-0.030	0.019	-0.044	0.011
14	0.627	0.358	0.718	1.000	0.645	0.660	0.016	-0.014	-0.054	-0.011
15	0.213	0.414	0.660	0.645	1.000	0.799	-0.011	-0.025	-0.029	0.011
16	0.222	0.405	0.651	0.660	0.799	1.000	0.013	-0.008	-0.021	0.011
17	-0.067	0.172	-0.009	0.016	-0.011	0.013	1.000	0.025	-0.013	0.011
18	-0.008	0.043	0.019	-0.014	-0.025	-0.008	0.025	1.000	0.500	-0.011
19	-0.040	0.010	-0.044	-0.058	-0.029	-0.001	-0.013	0.500	1.000	-0.011
20	0.145	0.101	0.076	-0.014	0.192	0.131	0.016	-0.071	-0.027	0.011
21	0.032	0.002	0.009	0.010	0.026	0.005	0.088	0.175	0.333	-0.011
22	-0.010	0.035	-0.014	0.138	0.039	0.025	0.051	0.150	0.346	-0.011
23	0.014	-0.038	0.030	-0.039	0.060	0.061	0.002	0.137	0.335	-0.011
24	0.125	0.123	0.150	0.055	0.105	0.119	0.156	-0.062	-0.046	0.011
25	0.027	-0.002	0.144	0.134	0.058	0.042	-0.049	-0.046	0.015	0.011
26	0.026	0.041	0.065	0.041	0.076	0.067	-0.033	0.001	0.032	0.011
27	-0.058	0.027	0.036	-0.004	0.012	-0.001	0.132	-0.033	0.014	0.011
28	-0.045	0.015	0.071	-0.015	0.019	-0.041	0.073	-0.095	-0.041	0.011
29	-0.042	0.050	0.077	0.032	0.033	-0.027	0.138	-0.035	-0.052	0.011
30	-0.056	-0.099	-0.061	-0.013	-0.093	-0.104	-0.012	0.048	0.092	0.011
31	-0.131	0.011	0.023	-0.067	0.021	-0.032	0.067	-0.022	0.017	0.011
32	-0.150	-0.053	-0.033	-0.037	-0.066	-0.100	0.012	-0.030	0.115	0.011
33	0.012	0.071	0.142	0.035	0.066	0.063	0.082	0.031	0.104	0.011
34	-0.112	-0.013	0.035	0.379	-0.026	-0.052	0.006	0.082	0.087	-0.011
35	-0.053	0.019	-0.011	0.075	0.022	0.127	0.042	0.076	0.071	-0.011
36	-0.111	-0.034	-0.039	0.055	-0.073	-0.105	0.021	-0.018	0.043	0.011
37	-0.116	-0.021	-0.026	0.010	-0.045	0.027	0.003	-0.044	0.031	0.011
38	0.017	-0.005	0.025	0.050	-0.050	0.027	0.066	0.053	0.026	0.011
39	0.013	0.029	0.062	0.133	0.063	-0.001	0.105	-0.001	-0.020	-0.011
40	-0.009	0.004	0.009	0.004	-0.004	-0.008	-0.015	0.004	-0.032	-0.011
41	-0.113	-0.145	-0.072	-0.003	-0.118	-0.103	-0.014	0.060	-0.018	-0.011
42	-0.045	-0.017	-0.001	0.008	-0.034	-0.072	0.047	0.045	-0.012	0.011
43	-0.067	0.103	-0.050	-0.013	-0.051	-0.053	0.226	0.171	0.090	0.011
44	-0.040	-0.036	-0.106	-0.055	-0.125	-0.074	0.068	0.199	0.174	-0.011
45	0.104	0.145	0.079	0.061	0.033	0.001	-0.031	0.011	0.107	0.011
46	0.123	0.060	0.077	0.118	0.027	0.071	-0.033	0.111	0.213	0.011
47	0.115	0.199	0.092	0.076	0.134	0.126	0.102	0.003	0.027	0.011
48	0.085	0.124	0.080	0.052	0.129	0.122	0.042	0.146	0.120	0.011
49	0.026	0.142	0.013	0.053	0.040	0.073	0.151	0.149	0.138	-0.011
50	0.109	0.084	0.017	-0.007	0.016	0.025	0.132	0.072	0.004	0.011
51	0.088	0.015	0.008	0.107	0.059	0.104	0.083	0.053	0.079	0.011
52	-0.034	-0.036	0.025	-0.067	0.047	0.030	0.038	0.089	0.033	0.011
53	0.176	0.093	0.060	0.121	0.113	0.136	0.035	0.053	0.060	0.011
54	0.005	0.034	-0.052	-0.011	-0.052	-0.014	0.053	0.100	0.102	0.011
55	0.014	0.159	0.023	0.026	0.031	0.051	-0.034	0.016	0.084	0.011
56	0.020	0.065	-0.031	-0.043	0.051	-0.001	0.014	-0.002	0.024	0.011
57	0.072	0.040	-0.083	-0.073	-0.060	-0.060	-0.009	0.119	0.050	0.011
58	0.016	0.061	0.024	0.051	-0.001	0.017	0.074	0.092	0.150	-0.011
59	-0.092	0.084	0.076	0.081	0.026	0.074	0.180	0.058	0.006	-0.011
60	0.062	0.066	0.068	0.094	0.046	0.014	0.032	0.013	0.018	-0.011
61	0.002	0.039	-0.086	-0.068	-0.083	-0.090	0.054	-0.044	0.037	-0.011
62	0.013	0.176	0.112	0.083	0.103	0.120	0.121	-0.019	-0.026	-0.011
63	0.058	0.212	0.088	0.118	0.143	0.120	0.204	0.038	0.030	0.011
64	0.002	0.027	0.003	0.028	0.073	0.046	0.045	0.055	0.039	0.011
65	0.025	0.050	-0.007	0.006	-0.001	0.040	-0.022	0.052	0.081	0.011
66	0.050	-0.010	0.023	0.005	-0.000	-0.031	0.096	0.060	0.028	-0.011
67	0.073	0.157	0.045	0.122	0.071	0.057	0.074	0.044	0.044	0.011
68	0.067	0.060	-0.004	-0.012	-0.030	-0.046	0.076	0.046	-0.045	-0.011
69	0.136	0.155	0.076	0.092	0.071	0.099	-0.019	0.017	0.069	0.011
70	0.034	0.084	-0.047	-0.025	-0.026	-0.030	0.157	0.073	0.071	0.011
71	-0.002	0.093	0.071	0.068	0.029	0.006	0.008	0.069	-0.007	0.011
72	0.071	0.173	0.077	0.064	0.396	0.169	0.139	0.127	0.202	-0.011
73	0.023	0.155	0.025	0.080	0.028	0.104	0.051	0.067	0.121	-0.011
74	0.073	0.148	0.094	0.082	0.081	0.098	-0.031	0.035	0.159	0.011
75	0.015	0.149	0.114	0.117	0.087	0.066	0.064	0.054	0.155	-0.011
76	0.036	0.087	0.052	0.060	0.044	0.062	0.065	0.091	0.098	-0.011
77	-0.010	-0.010	-0.008	-0.023	0.001	-0.052	0.109	0.007	-0.073	-0.011
78	0.039	0.053	0.016	0.036	0.013	0.013	0.031	0.002	-0.103	0.011
79	0.048	0.020	-0.000	0.001	0.001	0.041	0.104	0.104	0.038	-0.011
80	0.062	0.125	0.114	0.076	0.094	0.089	0.020	-0.019	-0.035	0.011

	21	22	23	24	25	26	27	28	29	30
1	0.131	0.075	0.117	0.135	0.117	-0.111	-0.099	-0.111	-0.111	-0.142
2	0.041	0.031	0.041	-0.117	0.082	0.095	0.019	0.076	0.144	0.137
3	-0.007	-0.016	-0.023	-0.150	0.100	0.095	-0.049	0.514	-0.001	0.099
4	0.051	0.105	0.043	0.131	-0.057	-0.018	0.011	0.016	0.117	-0.012
5	-0.012	0.029	0.112	0.011	0.117	0.117	0.030	0.441	0.058	-0.040
6	-0.004	0.117	0.007	0.047	-0.017	0.067	-0.117	-0.009	0.007	0.077
7	-0.032	0.046	0.140	0.030	-0.117	0.171	0.117	0.067	0.033	0.011
8	-0.006	0.018	-0.006	0.040	0.098	0.198	0.045	0.051	0.046	0.211
9	0.052	0.033	0.045	-0.006	-0.007	0.120	-0.017	-0.017	-0.075	-0.117
10	-0.055	-0.027	-0.102	-0.117	0.168	0.023	0.117	0.082	0.155	0.286
11	0.032	-0.010	0.067	0.125	0.027	0.026	-0.003	-0.045	-0.042	-0.117
12	0.062	0.035	-0.050	0.011	-0.002	0.041	0.027	0.015	0.050	-0.055
13	0.009	-0.014	0.030	0.150	0.144	0.069	0.036	0.071	0.077	-0.117
14	0.016	-0.128	-0.119	0.055	0.134	0.041	-0.011	-0.011	0.032	-0.011
15	0.026	0.039	0.060	0.105	0.056	0.078	0.012	0.019	0.033	-0.117
16	0.005	0.025	0.001	0.119	0.042	0.067	-0.001	-0.041	-0.027	-0.104
17	0.068	0.061	0.002	0.117	-0.049	-0.033	0.132	0.073	0.138	-0.112
18	0.115	0.150	0.137	-0.062	-0.046	0.001	-0.033	-0.011	-0.011	0.044
19	0.333	0.346	0.335	-0.117	0.015	0.032	0.014	-0.011	-0.052	0.117
20	-0.078	-0.050	-0.017	0.453	0.035	0.070	0.212	-0.117	-0.117	0.040
21	1.000	0.335	0.357	0.117	0.007	0.039	-0.049	-0.054	-0.117	0.017
22	0.335	1.000	0.420	-0.019	-0.011	-0.019	-0.095	-0.032	-0.055	0.033
23	0.357	0.420	1.000	0.033	0.117	0.117	-0.011	-0.026	0.000	-0.117
24	-0.013	-0.015	0.117	1.000	0.190	0.129	0.117	0.150	0.236	-0.021
25	0.007	-0.011	0.083	0.117	1.000	0.345	0.146	0.109	0.133	0.251
26	0.019	-0.015	0.128	0.129	0.345	1.000	0.001	-0.002	-0.005	0.302
27	-0.049	-0.045	0.079	0.274	0.146	0.061	1.000	0.301	0.295	-0.011
28	-0.014	-0.032	-0.026	0.156	0.109	-0.002	0.301	1.000	0.758	0.017
29	-0.071	-0.011	0.117	0.117	0.133	-0.005	0.295	0.738	1.000	0.024
30	0.017	0.033	-0.023	-0.021	0.259	0.302	-0.011	0.017	0.024	1.000
31	-0.038	-0.061	-0.049	0.116	0.158	0.163	0.111	0.165	0.214	0.229
32	0.009	0.003	0.036	0.092	0.401	0.301	0.073	0.111	0.092	0.117
33	0.030	-0.030	-0.030	0.144	0.117	0.117	0.083	0.115	0.117	0.150
34	0.056	0.047	-0.023	-0.117	0.143	0.109	-0.049	-0.070	-0.010	0.212
35	0.061	0.094	0.122	-0.061	0.117	0.117	-0.011	-0.011	-0.008	0.138
36	0.006	0.011	0.112	0.089	0.140	0.172	-0.011	0.009	0.073	0.225
37	-0.015	0.054	0.117	0.117	0.047	0.059	-0.011	0.011	0.040	-0.117
38	0.037	0.086	-0.001	0.045	0.065	0.074	0.041	0.008	0.124	0.044
39	0.036	-0.044	0.103	0.028	0.067	-0.029	-0.011	0.117	0.058	0.063
40	0.032	0.123	0.063	-0.038	0.050	0.150	-0.011	0.117	0.036	0.117
41	-0.008	0.117	-0.047	-0.039	0.191	0.109	-0.059	0.011	0.005	0.117
42	0.039	0.036	0.020	0.011	0.047	0.072	-0.058	0.090	0.101	0.117
43	0.105	0.073	0.128	0.117	-0.023	0.067	0.034	-0.011	-0.011	0.117
44	0.111	0.116	0.115	-0.015	0.018	0.042	0.053	-0.011	0.002	0.117
45	0.020	0.046	0.044	0.063	0.064	-0.031	0.053	-0.033	-0.031	-0.117
46	0.155	0.149	0.115	-0.038	0.065	0.112	0.038	-0.011	-0.107	0.117
47	0.162	0.067	0.117	0.119	0.050	0.123	0.083	0.043	-0.004	-0.117
48	0.155	0.152	0.153	0.035	0.011	0.015	0.031	-0.086	-0.067	-0.117
49	0.127	0.175	0.127	-0.061	-0.007	0.079	-0.022	-0.023	0.023	0.117
50	0.068	0.061	0.155	-0.011	-0.097	-0.002	0.017	0.051	0.028	-0.117
51	0.083	0.055	0.111	0.104	0.012	0.097	-0.002	0.016	0.008	0.117
52	-0.028	-0.024	-0.001	-0.041	0.028	-0.070	0.069	0.048	0.026	-0.044
53	0.125	0.040	0.015	0.200	-0.051	0.050	0.037	0.060	0.035	-0.117
54	0.029	0.089	0.037	-0.018	-0.011	0.117	0.052	0.057	0.061	0.117
55	0.161	0.106	0.106	0.142	-0.018	-0.004	0.107	0.103	0.054	0.117
56	0.125	0.152	0.128	0.002	-0.100	0.020	0.039	-0.032	-0.031	0.117
57	0.037	0.024	-0.128	-0.019	-0.017	0.034	-0.019	0.045	0.039	-0.011
58	0.106	0.036	0.114	0.012	0.002	0.127	-0.011	-0.020	-0.056	0.117
59	0.062	0.096	0.044	0.004	0.016	-0.080	0.054	0.044	0.072	0.117
60	0.140	0.078	0.039	-0.046	0.029	0.035	-0.022	0.082	0.082	0.117
61	0.112	0.076	0.095	-0.015	0.050	0.116	-0.011	0.014	0.041	0.117
62	0.143	0.066	0.050	0.033	0.055	0.059	0.011	0.055	0.029	-0.011
63	0.132	0.068	0.043	0.046	-0.002	-0.043	0.015	-0.075	-0.040	-0.011
64	0.160	0.080	0.124	0.008	0.055	0.032	0.004	-0.012	-0.011	-0.011
65	0.001	-0.024	0.051	0.051	-0.061	-0.064	-0.011	0.015	0.044	0.011
66	0.214	0.118	0.147	0.001	0.021	-0.003	0.016	-0.022	-0.041	-0.011
67	0.012	-0.010	0.004	0.151	0.009	-0.060	0.075	0.061	0.109	0.117
68	0.078	0.036	0.075	0.073	0.008	0.039	-0.011	-0.103	-0.071	-0.011
69	0.074	-0.030	-0.037	0.104	-0.040	-0.002	0.102	0.044	-0.011	-0.011
70	0.050	0.051	0.004	0.008	-0.010	0.013	0.119	0.052	0.056	0.117
71	0.020	0.053	0.101	0.166	0.056	0.053	0.121	0.127	0.111	0.117
72	0.218	0.121	0.131	0.072	-0.019	0.081	-0.043	-0.103	-0.118	-0.011
73	0.160	0.097	0.134	-0.008	0.117	0.117	0.013	-0.061	-0.052	-0.011
74	0.141	0.165	0.089	0.038	0.043	0.059	-0.053	-0.033	-0.063	0.117
75	0.160	0.132	0.117	0.117	0.041	0.125	-0.011	-0.011	-0.006	0.117
76	0.216	0.091	0.057	0.117	0.045	0.067	-0.011	-0.036	-0.065	0.117
77	-0.011	-0.062	0.066	0.017	0.033	-0.025	0.165	0.061	0.117	-0.011
78	-0.067	0.017	-0.010	0.117	0.117	-0.011	0.052	0.115	0.117	0.117
79	0.048	0.097	0.064	-0.012	0.028	0.075	-0.011	-0.122	-0.011	-0.011
80	0.046	-0.004	-0.117	0.117	-0.000	-0.093	0.093	0.140	0.158	-0.011

	31	32	33	34	35	36	37	38	39	40
1	-0.015	-0.012	0.015	-0.017	0.017	-0.025	-0.015	-0.090	-0.097	-0.010
2	0.003	0.009	0.030	0.034	0.019	0.028	0.158	0.057	0.156	0.011
3	0.100	0.120	0.046	0.077	0.078	0.149	0.137	0.070	0.094	0.000
4	-0.026	-0.079	-0.012	-0.073	-0.061	-0.114	-0.061	-0.128	-0.058	-0.000
5	-0.102	-0.025	-0.023	-0.074	-0.051	-0.066	0.061	0.055	0.032	0.000
6	0.026	0.040	0.023	0.077	0.017	0.074	0.071	0.021	0.050	-0.000
7	-0.016	-0.004	0.009	0.093	0.009	0.022	0.071	0.022	0.026	0.000
8	0.152	0.150	0.120	0.258	0.062	0.246	0.137	0.073	-0.045	0.000
9	-0.002	-0.139	0.007	-0.074	-0.009	0.001	-0.078	-0.042	-0.036	0.000
10	0.252	0.325	0.145	0.153	0.197	0.181	0.163	0.116	0.113	0.000
11	-0.131	-0.150	0.012	-0.112	-0.083	-0.111	-0.116	0.017	0.013	-0.000
12	0.011	-0.053	0.071	-0.013	0.019	-0.034	-0.021	-0.005	0.029	0.000
13	0.023	-0.033	0.142	0.035	-0.011	-0.039	-0.026	0.025	0.062	0.000
14	-0.067	-0.037	0.055	0.079	0.079	0.055	0.010	0.060	0.108	0.000
15	0.021	-0.066	0.086	-0.026	0.027	-0.073	-0.045	-0.050	0.063	-0.000
16	-0.033	-0.100	0.063	-0.057	0.046	-0.185	0.027	0.027	-0.001	-0.000
17	0.067	0.012	0.062	0.006	0.047	0.021	0.003	0.066	0.165	-0.000
18	-0.022	-0.030	0.031	0.040	0.076	-0.018	-0.004	0.053	-0.001	0.000
19	0.017	0.115	0.104	0.047	0.071	0.043	0.031	0.076	-0.020	-0.000
20	0.022	0.070	0.092	-0.025	-0.071	0.060	0.012	0.087	-0.018	-0.000
21	-0.028	0.009	0.000	0.056	0.061	0.006	-0.016	0.037	0.036	0.000
22	-0.021	0.003	-0.010	0.077	0.094	0.077	0.064	0.086	-0.084	0.000
23	-0.049	0.036	-0.010	-0.023	0.122	0.112	0.118	-0.001	0.103	0.000
24	0.116	0.092	0.144	-0.027	-0.061	0.089	0.025	0.045	0.028	-0.000
25	0.158	0.401	0.143	0.143	0.105	0.046	0.047	0.085	0.007	0.000
26	0.163	0.301	0.157	0.157	0.001	0.072	0.072	0.074	-0.020	0.000
27	0.111	0.073	0.073	-0.080	-0.027	-0.079	-0.002	0.041	-0.016	-0.000
28	0.145	0.098	0.115	-0.070	-0.027	0.009	0.055	0.088	0.020	0.000
29	0.214	0.092	0.117	-0.011	-0.019	0.073	0.080	0.124	0.058	0.000
30	0.229	0.446	0.150	0.232	0.138	0.026	0.043	0.049	0.063	0.000
31	1.000	0.375	0.132	0.060	0.045	0.074	0.004	0.024	-0.001	-0.000
32	0.375	1.000	0.432	0.197	0.090	0.151	0.044	0.093	0.019	0.000
33	0.532	0.432	1.000	0.170	0.037	0.043	-0.047	0.071	0.045	0.000
34	0.080	0.197	0.170	1.000	0.256	0.334	0.062	0.250	0.057	0.000
35	0.045	0.090	0.037	0.256	1.000	0.277	0.107	0.153	0.034	0.000
36	0.054	0.151	0.043	0.334	0.297	1.000	0.150	0.030	0.032	0.000
37	0.004	0.044	-0.044	0.047	0.107	0.150	1.000	0.155	0.257	0.000
38	0.024	0.093	0.023	0.250	0.153	0.030	0.156	1.000	0.171	0.000
39	-0.031	0.019	0.045	0.047	0.030	0.032	0.077	0.171	1.000	0.000
40	-0.002	0.070	0.088	0.293	0.077	0.077	0.200	0.149	0.241	0.000
41	0.077	0.147	0.015	0.226	0.133	0.131	0.133	0.250	0.261	0.000
42	0.163	0.095	0.081	0.131	0.015	0.187	0.385	0.184	0.187	0.000
43	0.060	0.128	0.043	0.146	0.042	0.117	0.195	0.152	0.116	0.000
44	-0.018	0.058	-0.001	0.043	0.043	-0.061	0.010	0.125	-0.011	0.000
45	-0.105	-0.011	-0.040	0.067	-0.021	-0.013	0.019	-0.003	0.080	0.000
46	-0.079	-0.048	-0.051	0.028	-0.040	-0.031	0.067	0.071	0.105	0.000
47	0.022	0.086	0.074	0.073	-0.019	-0.028	0.050	0.036	0.007	0.000
48	-0.013	-0.009	-0.035	0.076	0.107	0.019	0.075	0.026	-0.037	-0.000
49	-0.028	0.046	0.030	0.193	0.110	0.167	0.061	-0.008	0.014	-0.000
50	-0.124	-0.151	-0.010	-0.031	0.010	-0.049	0.010	-0.043	0.010	0.000
51	-0.082	-0.070	-0.025	0.065	0.105	-0.005	0.082	0.140	0.141	-0.000
52	0.011	-0.030	-0.004	-0.068	0.035	-0.075	-0.023	-0.097	-0.098	-0.000
53	-0.026	-0.078	0.031	0.046	0.060	-0.021	0.014	0.143	0.017	-0.000
54	0.087	0.025	0.029	0.135	0.035	0.132	0.107	0.125	0.029	0.000
55	0.007	0.014	0.067	0.023	0.016	0.037	0.031	0.133	0.090	0.000
56	-0.010	-0.001	0.017	0.028	-0.033	-0.013	0.062	0.061	0.095	0.000
57	-0.016	-0.013	-0.010	-0.006	0.016	-0.015	0.039	0.013	-0.012	0.000
58	0.012	0.086	0.014	0.228	0.242	0.177	0.111	0.061	-0.008	0.000
59	-0.056	-0.018	0.005	0.114	0.039	0.079	0.149	0.100	0.106	0.000
60	0.011	0.001	0.014	0.104	0.142	0.163	0.096	0.128	0.148	0.000
61	0.000	0.178	0.009	0.158	0.127	0.167	0.213	0.118	0.037	0.000
62	0.076	0.016	0.125	0.073	0.037	0.119	0.063	0.014	0.101	0.000
63	-0.013	0.053	0.122	-0.033	-0.033	-0.010	0.123	0.077	0.131	0.000
64	-0.049	-0.063	-0.022	0.055	0.141	0.091	0.077	0.044	0.011	0.000
65	0.066	0.028	0.020	-0.004	0.008	-0.035	0.045	0.034	0.054	-0.000
66	-0.074	-0.062	-0.020	0.114	0.142	0.049	0.016	0.013	0.015	0.000
67	0.025	0.050	0.040	0.046	0.167	0.166	0.053	0.110	0.104	0.000
68	0.058	0.085	0.048	0.059	0.036	0.017	0.107	0.087	0.017	0.000
69	-0.073	-0.098	-0.020	0.025	0.051	-0.015	0.070	0.059	-0.021	-0.000
70	-0.014	0.063	0.010	0.095	0.142	0.041	0.101	0.094	0.097	0.000
71	0.005	0.096	0.165	0.071	0.070	0.077	0.028	0.054	0.080	-0.000
72	-0.047	0.021	0.144	0.067	0.067	-0.013	-0.054	0.047	-0.064	0.000
73	-0.032	0.047	0.150	0.174	0.053	0.030	0.191	0.072	0.073	0.000
74	-0.060	-0.015	0.058	0.178	0.051	0.134	0.168	0.023	-0.002	0.000
75	-0.009	0.081	0.191	0.152	0.157	0.197	0.143	0.006	-0.003	0.000
76	-0.074	0.093	0.059	0.240	0.199	0.142	0.058	0.020	-0.020	0.000
77	0.056	0.038	0.129	-0.011	0.015	-0.061	-0.014	0.065	0.028	-0.000
78	0.004	0.062	0.015	0.001	0.035	0.004	0.114	0.092	0.031	0.000
79	-0.005	0.020	0.042	0.003	0.130	0.003	0.126	0.025	0.028	0.000
80	-0.041	0.008	0.017	-0.039	-0.008	-0.015	0.040	0.011	0.074	0.000

	41	42	43	44	45	46	47	48	49	50
1	-0.200	-0.127	-0.097	-0.077	-0.060	0.491	0.105	0.142	-0.015	0.000
2	0.179	0.147	-0.055	-0.036	0.020	0.013	-0.006	-0.117	-0.048	0.000
3	0.218	0.172	0.055	0.130	-0.070	0.015	-0.041	-0.014	-0.034	-0.100
4	-0.134	-0.112	-0.112	-0.101	0.046	0.043	0.004	0.047	0.083	0.134
5	0.077	0.070	-0.007	-0.055	-0.005	0.031	0.031	0.027	-0.070	0.050
6	-0.010	0.049	0.004	-0.007	0.030	0.011	0.024	0.006	0.113	0.040
7	0.019	0.045	-0.057	-0.039	-0.028	0.012	0.057	0.040	-0.039	0.118
8	0.028	0.058	0.095	0.006	-0.020	-0.012	-0.011	-0.032	0.092	0.000
9	-0.003	-0.019	-0.020	-0.119	0.172	0.205	0.012	0.093	-0.031	0.000
10	0.205	0.120	0.110	0.047	-0.138	-0.156	-0.082	-0.104	0.058	-0.135
11	-0.113	-0.045	-0.007	-0.040	0.104	0.123	0.115	0.089	0.026	0.130
12	-0.149	-0.017	0.103	-0.038	0.149	0.060	0.199	0.124	0.142	0.080
13	-0.072	-0.001	-0.050	-0.108	0.079	0.087	0.092	0.080	0.013	0.017
14	-0.003	0.008	-0.015	-0.055	0.061	0.118	0.078	0.092	0.053	-0.007
15	-0.118	-0.094	-0.051	-0.125	0.033	0.027	0.134	0.129	0.080	0.018
16	-0.103	-0.072	-0.053	-0.094	0.001	0.078	0.120	0.122	0.074	0.025
17	-0.014	0.097	0.226	0.068	-0.031	-0.038	0.102	0.042	0.151	0.132
18	0.060	0.035	0.171	0.199	0.021	0.111	0.004	0.146	0.169	0.072
19	-0.018	-0.012	0.090	0.174	0.107	0.233	0.027	0.120	0.138	0.004
20	-0.058	0.012	0.017	-0.114	0.044	0.015	0.050	0.015	-0.006	0.028
21	-0.008	0.039	0.105	0.171	0.030	0.155	0.162	0.195	0.127	0.088
22	0.066	0.030	0.073	0.116	0.046	0.149	0.066	0.152	0.175	0.061
23	-0.047	0.020	0.128	0.055	0.044	0.189	0.186	0.153	0.127	0.058
24	-0.024	0.010	0.034	-0.015	0.063	-0.038	0.119	0.035	-0.081	-0.034
25	0.151	0.047	-0.023	0.018	0.094	0.065	0.050	0.011	-0.007	-0.007
26	0.109	0.072	0.067	0.062	-0.031	0.112	0.123	0.015	0.079	-0.007
27	-0.059	-0.056	0.024	0.053	0.053	0.038	0.083	0.031	-0.022	0.017
28	0.008	0.090	-0.028	-0.002	-0.033	-0.025	0.043	-0.086	-0.023	0.001
29	0.006	0.101	-0.015	0.002	-0.031	-0.107	-0.004	-0.067	0.028	0.020
30	0.138	0.087	0.121	0.035	-0.067	0.052	-0.005	0.064	0.074	-0.007
31	0.077	0.103	0.000	-0.018	-0.105	-0.079	0.022	-0.053	-0.028	-0.107
32	0.147	0.095	0.128	0.068	-0.011	-0.043	0.060	-0.009	0.046	-0.007
33	0.055	0.081	0.043	-0.001	-0.040	-0.001	0.074	-0.035	0.030	-0.011
34	0.226	0.121	0.180	0.049	0.067	0.088	0.079	0.076	0.103	-0.031
35	0.133	0.040	0.042	0.085	-0.122	-0.045	-0.056	0.107	0.110	0.010
36	0.131	0.127	0.113	-0.001	-0.013	-0.001	-0.020	0.019	0.107	-0.007
37	0.138	0.385	0.105	0.010	0.019	0.077	0.050	0.076	0.061	0.000
38	0.250	0.184	0.152	0.125	-0.101	0.071	0.006	0.026	-0.008	-0.043
39	0.261	0.167	0.116	-0.011	0.080	0.105	0.007	-0.037	0.014	0.000
40	0.260	0.275	0.158	0.052	0.024	0.102	0.106	-0.034	-0.013	0.003
41	1.000	0.222	0.057	0.110	0.003	0.062	0.015	0.056	0.027	-0.011
42	0.222	1.000	0.164	0.081	0.038	0.059	0.011	0.021	0.050	0.032
43	0.057	0.164	1.000	0.201	-0.048	0.075	0.183	0.191	0.155	0.010
44	0.116	0.081	0.201	1.000	0.026	0.101	0.048	0.078	0.073	0.089
45	0.003	0.038	-0.048	0.000	1.000	0.370	0.135	0.100	0.109	0.098
46	0.062	0.059	0.075	0.101	0.370	1.000	0.152	0.167	0.075	0.001
47	0.015	0.011	0.183	0.048	0.135	0.152	1.000	0.273	0.148	0.205
48	0.056	0.021	0.151	0.078	0.100	0.167	0.273	1.000	0.215	0.152
49	0.027	0.050	0.155	0.073	0.109	0.075	0.148	0.215	1.000	0.178
50	-0.041	0.032	0.010	0.089	0.028	0.081	0.205	0.152	0.178	1.000
51	0.018	0.090	0.104	-0.005	-0.025	0.062	0.046	0.147	0.020	0.092
52	-0.014	-0.101	-0.061	0.005	0.018	-0.043	-0.083	0.032	0.113	0.065
53	0.011	-0.054	0.003	0.133	0.050	0.063	0.059	0.129	0.002	0.073
54	0.186	0.096	0.067	0.062	0.039	0.064	0.076	0.075	0.246	0.108
55	0.044	-0.002	0.053	0.032	0.078	0.073	0.203	0.013	0.083	0.034
56	-0.007	0.043	0.022	0.028	0.048	0.100	0.107	0.138	0.017	0.109
57	-0.075	0.017	-0.043	0.077	0.070	0.030	0.066	0.047	0.153	0.105
58	0.015	0.035	0.188	0.217	-0.023	0.084	0.049	0.092	0.110	0.040
59	0.172	0.113	0.135	0.120	0.217	0.003	0.089	0.203	0.156	0.107
60	0.173	0.187	0.128	0.060	0.073	0.134	0.024	0.012	0.034	-0.036
61	0.089	0.205	0.230	0.078	-0.008	0.073	0.039	0.048	0.075	-0.007
62	0.089	0.157	0.135	0.018	0.040	0.076	0.079	0.211	0.157	0.100
63	0.025	0.157	0.220	0.049	0.057	0.111	0.216	0.074	0.129	0.077
64	0.072	0.062	0.021	0.052	0.001	0.103	0.091	0.137	0.076	0.073
65	-0.030	-0.029	0.021	-0.103	-0.095	-0.077	-0.064	0.026	0.044	-0.025
66	0.053	0.054	0.052	0.076	0.074	0.140	0.115	0.126	0.190	0.050
67	0.081	0.012	0.144	-0.017	0.121	-0.000	0.007	0.053	0.134	0.001
68	0.019	0.089	0.157	0.135	0.098	0.016	0.115	0.098	0.132	0.002
69	0.031	-0.038	0.047	0.037	0.064	0.100	0.048	0.035	0.045	0.074
70	0.071	0.046	0.145	0.083	0.103	0.060	0.049	0.120	0.126	0.066
71	0.029	0.004	0.020	-0.021	0.121	0.096	0.078	0.055	0.115	0.076
72	0.006	0.068	0.134	0.091	0.095	0.126	0.168	0.075	0.125	0.095
73	0.002	0.075	0.170	0.055	0.039	0.033	0.134	0.133	0.191	0.070
74	0.101	0.144	0.134	0.073	-0.054	0.076	0.157	0.171	0.201	0.142
75	0.091	0.128	0.100	0.166	0.072	0.129	0.122	0.179	0.185	-0.014
76	0.093	0.086	0.127	0.206	0.146	0.110	0.157	0.167	0.174	0.007
77	-0.027	0.015	-0.027	0.030	0.144	0.040	0.035	0.048	0.117	0.021
78	0.062	0.052	-0.052	-0.037	0.049	-0.021	-0.024	0.033	0.030	0.015
79	0.089	0.143	0.102	0.127	0.095	0.123	0.097	0.116	0.041	0.110
80	-0.022	0.015	0.050	-0.053	0.077	0.034	0.092	0.024	0.012	0.064

	51	52	53	54	55	56	57	58	59	60
1	0.112	-0.117	0.110	-0.053	0.106	0.059	-0.026	-0.040	-0.009	0.110
2	0.042	-0.161	-0.145	0.044	-0.119	-0.057	-0.112	-0.042	0.038	0.110
3	-0.039	-0.090	-0.105	0.003	-0.122	-0.065	-0.037	0.043	0.070	-0.001
4	0.032	0.025	0.141	0.020	0.010	0.070	-0.003	-0.033	-0.048	0.005
5	0.014	-0.060	-0.027	0.017	0.030	0.015	-0.014	0.037	0.023	0.011
6	0.046	0.037	0.026	0.072	0.043	0.000	0.093	0.001	-0.026	-0.001
7	0.019	-0.024	0.016	0.074	-0.005	0.040	-0.031	0.076	-0.011	0.040
8	0.017	-0.108	-0.006	0.014	-0.026	0.079	0.003	0.133	0.041	-0.001
9	-0.002	-0.045	0.099	-0.007	0.001	0.012	-0.044	-0.005	-0.001	0.001
10	-0.074	-0.033	-0.271	0.023	-0.097	-0.057	0.038	0.021	0.065	0.031
11	0.018	-0.034	0.176	0.005	0.014	0.020	0.072	0.016	-0.092	0.060
12	0.085	-0.038	0.093	0.034	0.159	0.005	0.040	0.061	0.034	0.060
13	0.008	0.029	0.000	-0.052	0.023	-0.031	-0.083	0.024	0.076	0.060
14	0.107	-0.067	0.121	-0.011	0.028	-0.043	-0.073	0.051	0.081	0.090
15	0.059	0.047	0.113	-0.052	0.031	0.051	-0.060	-0.001	0.026	0.040
16	0.104	0.030	0.136	-0.014	0.051	-0.001	-0.060	0.017	0.074	0.011
17	0.088	0.038	0.035	0.058	-0.034	0.014	-0.000	0.074	0.180	0.031
18	0.058	0.089	0.053	0.100	0.016	-0.002	0.119	0.092	0.058	0.011
19	0.079	0.033	0.060	0.102	0.084	0.064	0.050	0.155	0.006	0.010
20	0.026	0.075	0.030	0.014	0.119	0.071	0.054	-0.099	-0.075	-0.001
21	0.083	-0.026	0.125	0.029	0.161	0.125	0.037	0.106	0.082	0.140
22	0.055	-0.024	0.040	0.089	0.106	0.152	0.024	0.036	0.076	0.070
23	0.111	-0.001	0.015	0.037	0.106	0.128	-0.032	0.114	0.044	0.030
24	0.104	-0.041	0.200	-0.018	0.142	0.002	-0.059	0.012	0.004	-0.040
25	0.042	0.028	-0.051	-0.001	-0.018	-0.100	-0.017	0.062	0.016	0.001
26	0.042	-0.070	0.050	0.041	-0.004	0.020	0.034	0.127	-0.080	0.030
27	-0.002	0.069	0.037	0.052	0.107	0.030	-0.019	-0.092	0.054	-0.020
28	0.016	0.046	0.060	0.057	0.103	-0.032	0.045	-0.020	0.044	0.070
29	0.051	0.026	0.035	0.061	0.054	-0.071	0.039	-0.056	0.072	0.001
30	0.009	-0.082	-0.119	0.077	0.002	0.012	-0.036	0.143	0.024	0.001
31	-0.082	0.011	-0.026	0.087	0.007	-0.010	-0.080	0.012	-0.000	0.001
32	-0.090	-0.030	-0.071	0.005	0.014	-0.031	-0.013	0.086	-0.018	0.001
33	-0.025	-0.004	0.031	0.029	0.007	0.017	-0.001	0.014	0.065	0.001
34	0.005	-0.085	0.046	0.135	0.023	0.028	-0.001	0.228	0.114	0.001
35	0.105	0.025	0.060	0.005	0.011	-0.033	0.016	0.242	0.049	0.001
36	-0.005	-0.075	-0.021	0.132	0.037	-0.018	-0.085	0.177	0.079	0.001
37	0.042	-0.023	0.014	0.102	0.002	0.002	0.002	0.111	0.140	0.001
38	0.140	-0.097	0.143	0.125	0.001	0.001	0.013	0.061	0.100	0.001
39	0.141	-0.098	0.017	0.029	0.090	0.095	-0.038	-0.063	0.106	0.001
40	-0.017	-0.054	-0.023	0.122	0.057	0.096	0.043	0.169	0.146	0.001
41	0.018	-0.004	0.011	0.186	0.044	-0.007	0.005	0.015	0.172	0.001
42	0.050	-0.101	-0.054	0.096	-0.002	0.043	0.017	0.035	0.111	0.180
43	0.104	-0.061	0.003	0.067	0.093	0.022	-0.043	0.188	0.135	0.128
44	-0.000	0.005	0.133	0.062	0.032	0.088	0.077	0.217	0.120	0.060
45	-0.025	0.018	0.000	0.039	0.078	0.048	0.076	-0.023	0.017	0.073
46	0.062	-0.043	0.063	0.064	0.073	0.109	0.030	0.084	0.003	0.134
47	0.046	-0.083	0.059	0.076	0.203	0.137	0.066	0.049	0.089	0.001
48	0.147	0.032	0.129	0.075	0.013	0.138	0.047	0.092	0.203	0.010
49	0.020	0.113	0.002	0.246	0.083	0.017	0.153	0.110	0.156	0.034
50	0.052	0.005	0.073	0.108	0.074	0.109	0.125	0.049	0.107	-0.001
51	1.000	-0.008	0.104	0.056	0.137	-0.007	-0.049	0.004	0.043	0.071
52	-0.008	1.000	-0.129	0.123	0.039	0.049	0.156	0.041	-0.019	0.030
53	0.104	-0.129	1.000	0.070	0.107	0.079	0.032	0.120	-0.004	0.010
54	0.056	0.123	0.070	1.000	0.110	0.154	0.126	0.163	0.019	0.120
55	0.137	0.039	0.107	0.110	1.000	0.233	0.014	0.038	0.119	0.120
56	-0.007	0.049	0.075	0.154	0.233	1.000	0.060	0.030	0.035	-0.015
57	-0.049	0.156	0.032	0.126	0.014	0.060	1.000	0.127	0.004	0.000
58	0.004	0.041	0.120	0.154	0.038	0.030	0.127	1.000	0.106	0.130
59	0.043	-0.019	-0.004	0.019	0.119	0.035	0.004	0.106	1.000	0.250
60	0.021	0.030	0.018	0.125	0.127	-0.018	0.064	0.137	0.250	1.000
61	-0.060	-0.002	-0.008	0.047	0.071	0.037	0.069	0.126	0.138	0.100
62	0.057	0.043	0.022	0.125	0.176	0.030	-0.025	0.151	0.250	0.300
63	0.073	0.070	-0.011	0.047	0.172	0.045	0.081	0.085	0.138	0.280
64	-0.018	0.057	0.105	0.087	0.103	0.110	0.069	0.201	0.158	0.180
65	0.063	0.009	0.044	0.064	-0.035	-0.056	-0.041	0.005	-0.008	-0.065
66	-0.070	0.128	0.047	0.196	0.190	0.168	0.072	0.184	0.085	0.150
67	0.101	0.020	0.105	0.111	0.136	-0.059	-0.073	0.112	0.138	0.072
68	-0.025	0.139	0.094	0.094	0.119	0.150	0.162	0.188	0.150	0.100
69	0.160	-0.036	0.191	0.070	0.101	0.062	-0.009	0.023	0.061	0.001
70	0.007	0.121	0.102	0.201	0.205	0.107	0.179	0.215	0.148	0.085
71	0.049	0.173	0.008	0.124	0.214	0.041	0.036	0.055	0.074	0.070
72	-0.022	0.093	0.136	0.062	0.174	0.088	0.059	0.210	0.125	0.030
73	0.052	0.114	0.034	0.225	0.158	0.101	0.008	0.183	0.176	0.099
74	0.052	0.050	0.108	0.107	0.190	0.015	0.074	0.196	0.175	0.260
75	-0.037	-0.021	0.078	0.015	0.206	0.075	0.091	0.227	0.174	0.280
76	-0.051	0.039	0.075	0.160	0.174	0.102	0.125	0.262	0.154	0.270
77	0.027	0.062	0.007	0.062	-0.014	0.053	-0.041	0.005	0.144	-0.001
78	0.116	0.090	0.000	0.074	0.111	0.075	0.077	0.120	0.117	0.020
79	0.045	0.085	0.100	0.144	0.087	0.072	0.165	0.374	0.087	0.060
80	0.005	0.120	0.100	0.003	0.133	-0.021	0.035	0.075	0.041	0.001

	61	62	63	64	65	66	67	68	69	70
1	-0.178	0.037	0.140	0.134	-0.328	0.118	-0.032	0.025	0.164	-0.077
2	0.244	0.013	0.040	-0.060	0.060	-0.031	0.062	0.007	-0.070	-0.011
3	0.161	-0.023	-0.015	-0.004	-0.002	-0.001	-0.043	0.007	-0.077	0.006
4	-0.209	0.025	-0.011	-0.030	0.133	0.057	0.022	-0.042	0.046	-0.011
5	-0.054	-0.057	-0.005	0.004	-0.003	-0.029	-0.050	0.002	0.077	-0.002
6	0.165	0.019	0.002	0.001	-0.001	0.079	0.014	-0.042	-0.028	0.004
7	-0.104	0.029	-0.050	-0.010	-0.005	-0.008	-0.026	0.029	-0.074	0.001
8	0.175	-0.007	0.0	-0.090	0.099	-0.037	0.007	-0.029	0.052	0.006
9	-0.061	0.073	0.072	0.003	0.020	0.139	0.054	-0.037	0.079	0.001
10	0.193	0.042	0.027	-0.027	0.013	-0.140	0.077	-0.007	-0.074	0.007
11	0.008	0.013	0.058	0.003	0.025	0.050	0.073	0.067	0.135	0.007
12	0.009	0.176	0.212	0.027	0.050	-0.010	0.197	0.050	0.155	0.002
13	-0.066	0.112	0.068	0.003	-0.007	0.023	0.043	-0.004	0.076	-0.004
14	-0.068	0.083	0.118	0.002	0.006	0.005	0.122	-0.012	0.092	-0.002
15	-0.083	0.103	0.143	0.123	-0.001	-0.000	0.071	-0.050	0.071	-0.002
16	-0.050	0.120	0.120	0.046	0.040	-0.031	0.057	-0.043	0.099	-0.003
17	0.054	0.121	0.204	0.045	-0.022	0.096	0.074	0.070	-0.019	0.155
18	-0.044	-0.019	0.008	0.053	0.052	0.060	0.044	0.040	0.017	0.001
19	0.037	-0.020	0.030	0.039	0.081	0.028	0.048	-0.045	0.069	0.007
20	-0.013	-0.040	0.007	0.010	0.033	-0.071	0.103	-0.022	0.003	0.002
21	0.112	0.143	0.132	0.110	0.001	0.214	0.012	0.078	0.074	0.005
22	0.076	0.066	0.068	0.036	-0.024	0.118	-0.010	0.026	-0.056	0.005
23	0.055	0.055	0.048	0.124	0.031	0.147	0.004	0.075	-0.037	0.008
24	-0.015	0.038	0.046	0.008	0.000	0.001	0.101	0.073	0.104	0.000
25	0.050	0.055	-0.002	0.055	-0.001	0.021	0.009	0.008	-0.000	-0.001
26	0.116	0.059	-0.043	0.032	-0.004	-0.003	-0.050	0.039	-0.002	0.011
27	-0.075	0.111	0.015	0.004	-0.062	0.016	0.075	-0.028	0.102	0.003
28	0.014	0.055	-0.075	-0.012	0.015	-0.022	0.061	-0.103	0.044	0.005
29	0.041	0.029	-0.060	-0.049	0.044	-0.061	0.109	-0.071	-0.036	0.001
30	0.139	-0.001	-0.052	-0.043	0.067	-0.117	0.141	-0.000	-0.004	0.003
31	0.060	0.076	-0.013	-0.049	0.066	-0.079	0.025	0.058	-0.073	-0.001
32	0.178	0.018	0.053	-0.063	0.028	-0.062	0.050	0.045	-0.098	0.006
33	0.069	0.125	0.122	-0.022	0.028	-0.020	0.040	0.048	-0.020	0.001
34	0.158	0.073	-0.030	0.055	-0.004	0.114	0.046	0.059	0.025	0.009
35	0.127	0.037	-0.033	0.141	0.008	0.167	0.035	0.035	0.141	0.001
36	0.167	0.119	-0.010	0.091	-0.035	0.049	0.166	0.017	-0.001	0.004
37	0.212	0.066	0.138	0.077	0.045	0.018	0.008	0.107	0.070	0.100
38	0.118	0.014	0.077	0.044	0.034	0.013	0.110	0.087	0.059	0.001
39	0.037	0.101	0.141	0.011	0.054	0.015	0.104	0.017	-0.021	0.009
40	0.154	0.184	0.036	0.135	-0.159	0.010	0.002	0.005	-0.000	0.010
41	0.089	0.089	0.025	0.072	-0.030	0.093	0.041	0.019	0.031	0.007
42	0.205	0.187	0.117	0.062	-0.002	0.054	0.012	0.039	-0.038	0.001
43	0.230	0.135	0.220	0.021	0.021	0.052	0.143	0.137	0.047	0.145
44	0.078	0.018	0.049	0.002	-0.102	0.076	-0.017	0.135	0.037	0.060
45	-0.000	0.040	0.057	0.001	-0.085	0.074	0.111	0.000	0.064	0.001
46	0.073	0.076	0.111	0.103	-0.077	0.140	-0.000	0.016	0.100	0.006
47	0.029	0.079	0.216	0.091	-0.064	0.115	0.067	0.115	0.043	0.009
48	0.049	0.211	0.074	0.137	0.026	0.126	0.053	0.028	0.085	0.120
49	0.075	0.157	0.129	0.076	0.044	0.190	0.134	0.132	0.045	0.127
50	-0.058	0.111	0.077	0.073	-0.025	0.050	0.001	0.062	0.074	0.006
51	-0.060	0.057	0.073	-0.018	0.083	-0.070	0.101	-0.025	0.160	0.002
52	-0.002	0.043	0.070	0.057	0.009	0.128	0.020	0.139	-0.033	0.120
53	-0.068	0.022	-0.011	0.105	0.044	0.047	0.109	0.094	0.191	0.100
54	0.057	0.125	0.047	0.087	0.064	0.196	0.111	0.094	0.070	0.201
55	0.071	0.176	0.172	0.103	-0.035	0.190	0.146	0.118	0.101	0.200
56	0.037	0.030	0.045	0.110	-0.004	0.168	-0.059	0.150	0.062	0.100
57	0.089	-0.025	0.081	0.069	-0.041	0.052	-0.093	0.162	-0.009	0.170
58	0.126	0.151	0.085	0.201	0.005	0.184	0.112	0.188	0.023	0.200
59	0.138	0.250	0.188	0.158	-0.008	0.085	0.158	0.150	0.061	0.180
60	0.226	0.307	0.285	0.189	-0.065	0.153	0.072	0.159	0.002	0.085
61	1.000	0.167	0.212	0.143	-0.091	0.122	0.117	0.144	-0.042	0.146
62	0.167	1.000	0.364	0.246	-0.056	0.164	0.072	0.060	0.053	0.088
63	0.212	0.364	1.000	0.147	0.032	0.153	0.174	0.156	0.072	0.109
64	0.143	0.246	0.147	1.000	-0.393	0.364	0.057	0.175	0.018	0.117
65	-0.051	-0.056	0.032	-0.393	1.000	-0.105	0.187	0.034	0.036	0.109
66	0.122	0.164	0.153	0.364	-0.105	1.000	0.098	0.159	0.046	0.083
67	0.119	0.072	0.174	0.057	0.187	0.098	1.000	0.141	0.101	0.158
68	0.144	0.080	0.156	0.175	0.034	0.159	0.141	1.000	0.116	0.253
69	-0.042	0.065	0.072	0.018	0.086	0.046	0.191	0.116	1.000	0.104
70	0.146	0.088	0.169	0.117	0.109	0.083	0.198	0.251	0.104	1.000
71	0.042	0.032	0.091	0.068	0.057	0.083	0.245	0.202	0.040	0.233
72	0.106	0.065	0.149	0.164	0.025	0.175	-0.021	0.226	0.073	0.213
73	0.101	0.150	0.220	0.115	0.106	0.255	0.148	0.159	0.111	0.279
74	0.155	0.275	0.219	0.262	0.007	0.197	0.100	0.123	0.072	0.122
75	0.229	0.356	0.170	0.248	-0.005	0.253	0.127	0.174	0.111	0.146
76	0.163	0.319	0.197	0.271	-0.095	0.311	0.098	0.153	0.104	0.190
77	0.060	-0.025	0.031	-0.001	0.055	-0.011	0.171	0.172	0.031	0.209
78	0.072	-0.003	0.073	-0.077	0.171	-0.017	0.205	0.146	0.083	0.206
79	0.149	0.195	0.166	0.295	-0.046	0.250	0.058	0.147	0.092	0.279
80	-0.051	0.055	0.123	0.300	0.078	0.160	0.158	0.147	0.090	0.100

	71	72	73	74	75	76	77	78	79	80
1	0.003	0.173	0.070	0.143	0.030	0.015	0.001	-0.112	0.031	0.152
2	0.042	-0.112	0.000	-0.112	0.000	0.000	0.000	0.100	-0.031	0.130
3	-0.032	-0.093	-0.009	-0.074	-0.072	0.068	0.001	0.139	-0.031	-0.070
4	0.060	0.000	0.000	0.000	0.000	0.000	-0.001	-0.010	0.020	0.100
5	-0.007	-0.013	0.000	0.000	0.000	0.009	0.013	0.000	0.000	0.000
6	-0.022	0.005	-0.007	0.000	0.000	0.013	0.000	-0.070	0.100	-0.007
7	0.016	-0.000	-0.000	0.000	0.000	0.014	-0.013	-0.000	0.042	-0.040
8	-0.031	0.030	0.010	0.000	0.000	0.032	-0.056	0.010	-0.014	0.100
9	-0.011	0.000	0.040	0.000	0.030	0.000	0.000	0.000	0.000	0.000
10	-0.001	-0.000	0.000	-0.111	0.000	0.022	0.011	0.000	-0.000	-0.000
11	-0.002	0.071	0.000	0.073	0.000	0.030	-0.010	0.030	0.040	0.000
12	0.003	0.173	0.111	0.143	0.149	0.007	-0.010	0.003	0.030	0.129
13	0.071	0.077	0.000	0.094	0.114	0.052	0.000	0.010	-0.000	0.114
14	0.008	0.064	0.000	0.062	0.117	0.000	-0.023	0.000	0.018	0.070
15	0.029	0.090	0.000	0.000	0.007	0.044	0.001	0.013	0.001	0.094
16	0.006	0.169	0.104	0.098	0.000	0.000	-0.052	0.013	0.041	0.080
17	0.008	0.139	0.000	-0.000	0.004	0.005	0.109	0.030	0.104	0.020
18	0.069	0.187	0.067	0.000	0.000	0.091	0.007	0.002	0.104	-0.000
19	-0.007	0.000	0.000	0.000	0.155	0.098	-0.073	-0.103	0.030	-0.000
20	0.211	-0.023	-0.073	0.047	-0.027	-0.004	-0.000	0.104	-0.050	0.130
21	0.020	0.210	0.180	0.141	0.160	0.216	-0.011	-0.007	0.048	0.046
22	0.053	0.111	0.007	0.000	0.132	0.021	-0.062	0.017	0.007	-0.004
23	0.101	0.151	0.000	0.000	0.000	0.007	0.000	-0.010	0.004	-0.000
24	0.186	0.022	-0.000	0.040	0.027	0.000	0.017	0.102	-0.000	0.140
25	0.066	-0.010	0.000	0.043	0.041	0.000	0.033	0.000	0.028	-0.000
26	0.053	0.081	0.030	0.000	0.000	0.066	-0.025	0.000	0.075	-0.093
27	0.121	-0.043	0.000	-0.058	-0.039	0.000	0.105	0.002	-0.000	0.098
28	0.127	-0.103	-0.000	-0.053	0.057	-0.036	0.001	0.115	-0.122	0.140
29	0.171	-0.110	-0.000	-0.000	-0.000	0.000	0.000	0.137	-0.126	0.150
30	0.102	-0.037	-0.033	0.070	0.071	0.074	-0.077	0.030	0.054	0.000
31	0.065	-0.007	-0.032	-0.000	-0.009	0.000	0.000	0.004	-0.000	-0.000
32	0.056	0.031	0.000	-0.000	0.001	0.003	0.030	0.002	0.030	0.000
33	0.169	0.144	0.150	0.058	-0.101	0.059	0.122	0.010	0.032	0.017
34	0.071	0.007	0.120	0.100	0.162	0.000	-0.001	0.001	0.003	-0.000
35	0.070	0.000	0.000	0.001	0.157	0.104	0.015	0.007	0.130	0.000
36	0.077	-0.010	0.000	0.140	0.197	0.142	0.000	0.000	0.043	-0.010
37	0.020	-0.004	0.100	0.100	0.143	0.000	-0.014	0.114	0.120	0.040
38	0.054	0.047	0.000	0.000	0.000	0.000	0.000	0.002	0.020	0.011
39	0.000	-0.004	0.000	-0.002	-0.000	-0.020	0.000	0.000	0.000	0.074
40	-0.045	0.075	0.140	0.107	0.083	0.116	-0.073	0.023	0.107	0.001
41	0.005	0.000	0.002	0.101	0.001	0.003	-0.007	0.002	0.000	-0.002
42	0.004	0.000	0.000	0.100	0.120	0.000	0.000	0.003	0.143	0.000
43	0.020	0.134	0.130	0.134	0.100	0.127	-0.027	-0.003	0.102	0.056
44	-0.021	0.091	0.000	0.073	0.100	0.206	0.036	-0.007	0.127	-0.000
45	0.121	0.000	0.000	-0.000	0.100	0.146	0.140	0.000	0.000	0.000
46	0.006	0.120	0.000	0.000	0.129	0.110	0.040	-0.021	0.123	0.034
47	0.070	0.100	0.130	0.107	0.100	0.107	0.000	-0.024	0.097	0.092
48	0.005	0.075	0.130	0.100	0.179	0.167	0.000	0.033	0.116	0.024
49	0.115	0.100	0.191	0.200	0.100	0.174	0.100	0.030	0.241	0.000
50	0.036	0.000	0.070	0.142	-0.033	0.000	0.021	0.000	0.116	0.000
51	0.009	-0.022	0.000	0.002	-0.037	-0.031	0.027	0.116	0.045	0.065
52	0.173	0.000	0.114	0.000	-0.031	0.039	0.062	0.000	0.100	0.126
53	0.060	0.130	0.034	0.100	0.070	0.075	0.007	0.040	0.120	0.120
54	0.124	0.060	0.225	0.107	0.016	0.160	0.000	0.074	0.100	0.033
55	0.219	0.174	0.150	0.100	0.206	0.174	-0.013	0.111	0.007	0.133
56	0.041	0.080	0.103	0.010	0.075	0.102	0.003	0.075	0.072	-0.000
57	0.036	0.000	0.000	0.000	0.091	0.100	-0.041	0.079	0.165	0.030
58	0.055	0.210	0.100	0.100	0.200	0.200	0.000	0.120	0.304	0.075
59	0.024	0.120	0.176	0.175	0.174	0.100	0.144	0.117	0.007	0.041
60	0.076	0.093	0.000	0.207	0.200	0.270	-0.002	0.036	0.000	0.072
61	0.042	0.100	0.101	0.100	0.200	0.103	-0.000	0.072	0.100	-0.001
62	0.032	0.065	0.100	0.000	0.350	0.319	-0.000	-0.103	0.100	0.003
63	0.001	0.149	0.220	0.210	0.100	0.100	0.031	0.000	0.104	0.123
64	0.068	0.104	0.115	0.100	0.240	0.271	-0.001	-0.007	0.305	0.007
65	0.057	0.000	0.100	0.007	-0.000	-0.000	0.000	0.171	-0.040	0.070
66	0.083	0.175	0.200	0.197	0.253	0.311	-0.011	-0.017	0.250	0.140
67	0.255	-0.021	0.100	0.100	0.127	0.000	0.171	0.295	0.000	0.150
68	0.202	0.226	0.100	0.123	0.174	0.153	0.100	0.140	0.147	0.147
69	0.062	0.073	0.111	0.072	0.111	0.104	0.031	0.000	0.000	0.000
70	0.233	0.210	0.200	0.122	0.140	0.196	0.200	0.206	0.278	0.105
71	1.000	-0.014	0.110	0.107	0.181	0.117	0.240	0.275	0.036	0.111
72	-0.014	1.000	0.500	0.200	0.251	0.309	0.047	0.021	0.297	0.140
73	0.110	0.500	1.000	0.367	0.259	0.324	0.100	0.127	0.344	0.170
74	0.137	0.292	0.367	1.000	0.400	0.441	-0.000	0.000	0.290	0.101
75	0.181	0.251	0.250	0.407	1.000	0.610	0.007	0.000	0.285	0.100
76	0.117	0.309	0.324	0.400	0.610	1.000	0.000	0.000	0.329	0.099
77	0.240	0.047	0.100	-0.000	0.007	0.051	1.000	0.000	0.000	0.133
78	0.255	0.000	0.100	0.000	0.050	0.040	0.200	1.000	-0.000	0.179
79	0.036	0.250	0.344	0.200	0.285	0.329	0.007	-0.000	1.000	0.100
80	0.311	0.140	0.170	0.100	0.100	0.099	0.133	-0.170	0.000	1.000

APPENDIX P

APPENDIX P

VARIABLES CORRELATED FOR NATIVE STUDENT, NON-NATIVE STUDENT AND TOTAL STUDENT SAMPLES

* These variables apply only to the total student sample analysis.

** These variables apply only to the native student sample analysis.

- * 1) Native ancestry
- * 2) Age
- ** 3) Speaking of native tongue
- 4) Living with family
- 5) Intactness of home
- 6) Part-time employment
- 7) Summer employment
- 8) Liking of present job
- 9) Perceived discrimination on present job
- 10) Amount of employment agency contact
- *11) Sex
- 12) Amount of general agency contact by family
- 13) Amount of general agency contact by self
- 14) Perception of adequate number of agencies
- 15) Perception of agencies catering to needs
- 16) Perception of adequate variety of agencies
- 17) Perception of inadequacy of agencies in general
- 18) Participation in community league
- 19) Liking of Edmontonians
- 20) Perception of friendliness of Edmontonians
- 21) Perception of unfriendliness of Edmontonians
- 22) Perception of Edmontonians' understanding
- 23) Perception of Edmontonians' helpfulness
- 24) Perception of Edmontonians trying to do things with you
- 25) Perceived avoidance of Edmontonians
- 26) Perceived trouble finding housing
- 27) Perceived trouble finding employment
- 28) Perception of being hassled in street
- 29) Perception of being hassled by men
- 30) Perception of being hassled by people

- 31) Perceived trouble with service in bars
- 32) Perceived trouble with service in stores
- 33) Perceived trouble with service from welfare
- 34) Perceived trouble with service in bus depot
- 35) Perceived friendliness of police
- 36) Would go to police for help
- 37) Perceived confidence in police
- 38) Where would go for emotional troubles
- 39) Where would go when lonely
- 40) Where would go when frustrated
- 41) Where would go when in trouble
- 42) Where would go when broke
- 43) Where would go for advice
- 44) Desire to integrate
- 45) Prefer to live in Edmonton like others
- 46) Prefer to keep traditional way of life
- ** 47) Prefer city life to life on reserve
- 48) Prefer to practice traditions
- 49) Desire for independence
- 50) Desire to achieve recognition
- 51) Expression of hope to master some skill
- 52) Acceptance of self
- 53) Perception of life as a series of problems
- 54) Feeling of need to be alone
- 55) Need of always having friends around
- 56) Liking of some basic goals in life
- 57) Experience of close interpersonal relations
- 58) Perception of difference between means and ends
- 59) Perception of possession of a good sense of humor
- 60) Perception of conformity
- 61) Perception of place in school
- 62) Perception of administration
- 63) Perception of guidance counsellors
- 64) Perception of teachers
- 65) Perception of other students
- 66) Liking of subjects taking
- 67) Why likes subjects taking
- 68) Perception of subjects' usefulness

- 69) Perception of subjects' difficulty
- 70) Desired grade level
- 71) Why grade level is sufficient
- 72) Possession of non-native friends
- 73) Perceived trouble in making friends
- 74) Perception of students liking self
- 75) Liking of other students
- 76) Perception of teachers liking self
- 77) Liking of teachers
- 78) Perceived helpfulness of teachers
- 79) Humiliating examples by teachers
- 80) Perception of teacher punishment
- 81) Perception of happiness
- 82) Perception of unhappiness

APPENDIX Q

CORRESPONDENCE RE OBJECTIVES OF NATIVE

YOUTH STUDY

Dave Rehill
Research Supervisor

Mr. Randy Nicholson
Leadership Development Specialist

February 25, 1970

Further to your memo of February 19, the following is a brief outline of the research we discussed regarding Native Youth in Edmonton.

As I see it we have identified three basic objectives:

- (1) To determine the needs of Native youth and kinds of resources necessary to meet their needs.
- (2) To determine the availability and adequacy of present resources intended to meet these needs.
- (3) To recommend action to be taken where resources are either non existant or inadequate.

In order to meet these objectives the following action is proposed:

- (1) A list of youth serving resources including those specifically designed for native youth in the City of Edmonton be compiled.
- (2) Steps be undertaken to:
 - (a) determine the needs, both immediate and long term of the native youth, and
 - (b) to obtain an indication of the attitudes of native youth towards the resources available.
- (3) An evaluation be made of the available resources by testing the services supposedly offered by each.

More specifically a longitudinal study would be carried out on a sample of Native Youth. For each individual we would determine:

- (1) Needs both immediate and long range.

February 25, 1970

- (2) Resources available to meet his or her needs.
- (3) Adequacy of the resources in terms of how well they meet his or her personal requirements.
- (4) Resources not available but necessary.

You will note that none of the details have been included. These I feel should be worked out to the mutual satisfaction of yourself, the Native Youth Committee, the project consultants and any other group or persons you feel relevant.

Dave Rehill
Research Supervisor

DR/sc

Meeting with Research Supervisor
- Friday, 17th April

Attendance:

Dave Rehill
Louis Lamothe
Don Stewart
Randy Nicholson

The recommendations made by the sub-committee at its meeting on Wednesday, April 15 were accepted. (See minutes.)

Some of the objectives as identified by the sub-committee were incorporated and in a few instances deleted.

The objectives now are as follows:

- a) To determine the native youth population of the City of Edmonton, both transient and resident.
- b) To determine what agencies exist within the City of Edmonton that offer facilities and services to native youth.
- c) To determine how these services are viewed by native youth.
- d) To determine what problems; social, cultural and educational are encountered by native youth residents in the city.
- e) To determine how agencies view native youth.
- f) To make recommendations if necessary to improve the situation as identified in the research study.

Identification of Population

It was suggested that Dr. Card be approached to undertake the above in a consultative capacity. The sum of \$600.00 to be met from the Research Division will be available to him.

Letters of Validation

It was suggested that letters requesting their cooperation be sent from the Hon. Minister of Youth to the following:

- 1. Superintendent, Separate School Board
- 2. Superintendent, Public School Board
- 3. A general letter of identification to Louis Lamothe for use in his investigation.

(Mrs.) Gloria Siperko,
Research Assistant.

D. H. Rehill,
Research Director.

November 18, 1970

On the afternoon of November 17, 1970, I met with Randy Nicholson to discuss the objectives and hypotheses of the Native Youth Advisory Committee in terms of Phase II of the Native Youth Study.

Mr. Nicholson reaffirmed the objectives that were outlined by himself in his memorandum to D. Rehill, dated February 25, 1970. These objectives were:

- 1) To determine the needs of the Native Youth and kinds of resources to meet their needs.
- 2) To determine the availability and adequacy of present resources in terms of meeting their needs.
- 3) To recommend action to be taken where resources are either nonexistent or inadequate.

The following hypotheses (presuppositions) were also stated, as suggested by the Native Youth Advisory Committee.

- 1) The needs of the Native Youth have not been met in the past.
- 2) Since the needs of the Native Youth have not been met this has resulted in Native Youth dissatisfaction.
- 3) Since the needs of the Native Youth have not been met and this population is dissatisfied, the Department of Youth has a role to fill.

Copies to: R. E. Nicholson
L. L. Keown
L. Laroche

GLORIA SIPERKO
Research Assistant.

(Mrs.) Gloria Siperko,
Research Assistant.

D. H. Rehill,
Research Director.

November 18, 1970

On the afternoon of November 12, 1970, I met with Louis Lamothe to discuss the objectives, a priori hypotheses and variables of the Native Youth Study, Phase II.

The following objectives were identified:

- 1) To determine the opinions of the native youth in terms of:
 - a) were native youth agencies meeting the youths' perceived needs?
 - b) were native youth agencies meeting any other needs?
 - c) how adequately were these needs being met?
- 2) To identify the perceived needs of native youth.
- 3) To assess the degree of correspondence between native youth perceived needs and "conventional" societies' needs.
- 4) To determine possible resultant action - ie. should the Department of Youth get involved in terms of the Native Youth unmet needs?
- 5) To determine if the Department of Youth should get involved re native youth unmet needs, and in what capacity and form the involvement should be.
Specifically:
 - a) in what need areas should the Department of Youth become involved?
 - b) what "type" of Department of Youth personnel does this involvement require?

Four specific objectives in terms of Education, were also outlined:

- 1) To determine under what circumstances the student native youth would consider leaving school.
- 2) To determine the attitudes of the student native youth toward the school structure, administration, etc.
- 3) To determine the student native youth goals.
- 4) To suggest how the curriculum of the present school system may be changed to meet the perceived educational needs and goals of the native youth.

Two a priori hypotheses were also suggested:

- 1) The amount of unmet needs will be directly related to the amount of happiness and unhappiness of the native youth.
- 2) Native youth dissatisfaction with school will be directly related to the degree of perceived applicability of the school curriculum to their needs.

It was also suggested that the initial draft of the Introductory Chapter of the Native Youth report could now be written. Another meeting was tentatively set after the research assistant similarly consulted with Larry Keown, Randy Nicholson and Jane Leat.

GLORIA SIPERKO,
Research Assistant.

GS/kr

Copies to: R. R. Nicholson
L. L. Keown
L. Lanothe



MEMORANDUM

FROM: (Mrs.) GLORIA SIPERKO
Research Assistant

OUR FILE NO.:

YOUR FILE NO.:

TO: D.H. REHILL
Research Director

DATE: November 26, 1970

At several meetings during the first three weeks in November, 1970, the following objectives and hypotheses for Phase II of the Native Youth Study were listed by L.L. Keown at my request:

OBJECTIVES - RELATED AGENCY

- Primary:
- 1) To determine needs of native youth in Edmonton,
 - 2) To determine the resources available to meet these needs,
 - 3) To determine if the agencies that are to meet the perceived needs of the native youth, actually meet these needs:
 - a) to determine if there are enough agencies (quantity)
 - b) quality of services
 - c) to determine the agency services (relevant to perceived needs)
 - d) to suggest future expansion and development of youth serving agencies
- A related implied objective can be suggested as: if development is needed - what or who should be the supply, i.e. Does the Department of Youth have a role in meeting the future needs of native youth?
- e) to assess whether these agencies actually provide what they claim to provide
 - 4) To suggest if services could be improved by reallocating or by reapportioning resources. For example, elimination of duplicate services between agencies, reducing overhead, etc.

OBJECTIVES RELATED TO EDUCATION

- 1) To identify if the native youth possess specified educational needs,
- 2) To determine the relevance of the school system to the native youth needs,
- 3) To determine the extent of academic wastage:
 - a) to identify relevant factors related to native youth leaving school:
 - i) to assess the extent and character of student employment,
 - ii) to identify the attitudes of the native youth students towards the school administration, their fellow students, and education in the global sense. (i.e. - is the education system "relevant" from the native viewpoints?)
 - iii) to assess the extent and character of school aged native youth who are neither employed nor in school.

SOCIAL OBJECTIVES

- 1) To determine how native youth perceive the people in Edmonton,
- 2) To assess the extent of native discrimination, and general liability (if any),
- 3) To determine the extent of native youth assimilation into the general society,
- 4) To identify the native youth attitude re assimilation and integration into the general society.

EMPLOYMENT OBJECTIVES

- 1) To determine the character and extent of native youth employment.

Specifically:

- i) summer employment, patterns, patterns of student employment, etc.

HYPOTHESES

General:

1. Hypothesis 1 - the needs (perceived and actual) of native youth are those which are common to their socio-economic status and not to their ethnicity.
2. That native students as a whole perceive themselves as enjoying amicable relationships with their non-native classmates and teachers.
3. That natives perceive non-native Edmontonians as generally friendly, understanding and helpful in the majority of cases.
4. That natives find the police friendly in the majority of cases, but that do not go to the police for help, nor do they have confidence in the police.
5. When natives have emotional problems or troubles they seek out their native friends and/or family.

Education and Employment:

1. That native youth who live with their mother (absence of male relatives/ absence of father) will show poorer adjustment to school, and employment than will native youth who reside with their father or male relative.
2. That there will be a high positive relationship between the amount of non-summer student employment and the native youth students perceived lack of relevance of the school system.

Agency Services:

1. That natives do not feel that they receive inferior services from agencies because of their ethnicity, (i.e. the agency is uniformly inferior.)

SPECIFIC LATENT STRUCTURE HYPOTHESES

1. That alienation is a factor determined by socio-economic class and not by ethnic origin.
2. That the latent structure of needs has two components: physical-basic primary needs and social-acceptance.
 - a) that basic physical needs are the minor component,
 - b) that the social component may be putatively called "tribal affiliation".
3. That unhappiness is a function of personality structure (adjustment, lack of confidence, etc.) and not a function of un-met physical needs.
4. That school adjustment is relatively independent of ethnic origin and socio-economic factors, (i.e. that it involves independent personality factors).

5. That subject Sex is an independent factor, i.e. independent of other factors.

6. That "intactness of home or tribal affiliation" is a major determinant of adjustment and is also independent of the alienation factor.

At these meetings, possible methods of analysis and programs were also discussed.

GLORIA SIPERKO
Research Assistant

GS/wlt

Copies to: Mr. R.R. Nicholson
Mr. Louis Lamothe
Mr. L.L. Keown

B I B L I O G R A P H Y

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